

1. FULL LENGTH PLASMID: 1-9395 (GENBANK ACCESSION NUMBER AF 121950)

2.

3.

4.

5.

6.

7.

8.

9.



FIG. 1A



**FIG.1B**

0.05

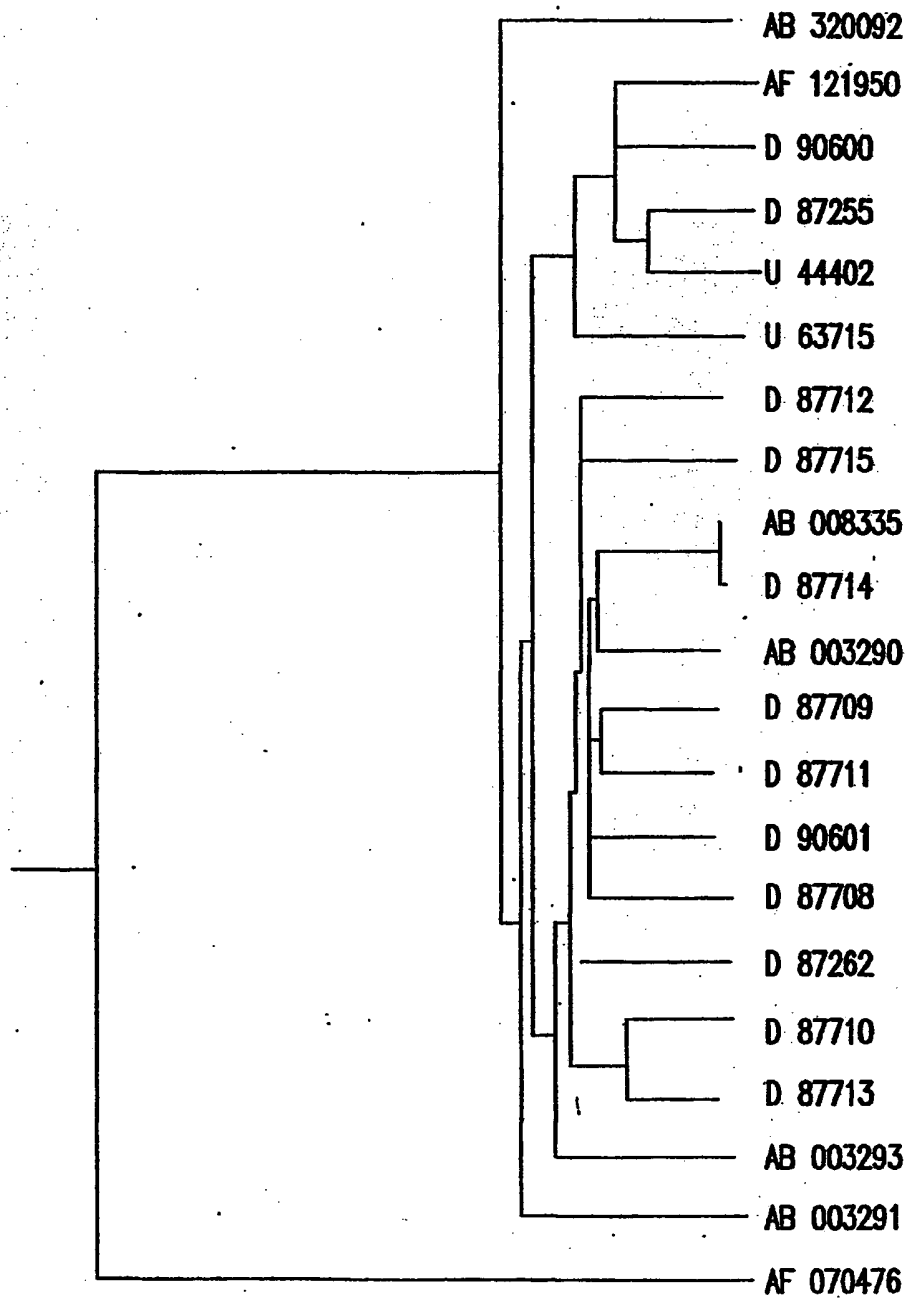


FIG.2

0.05

GBV-B

GBV-C

HCV

FIG. 3A

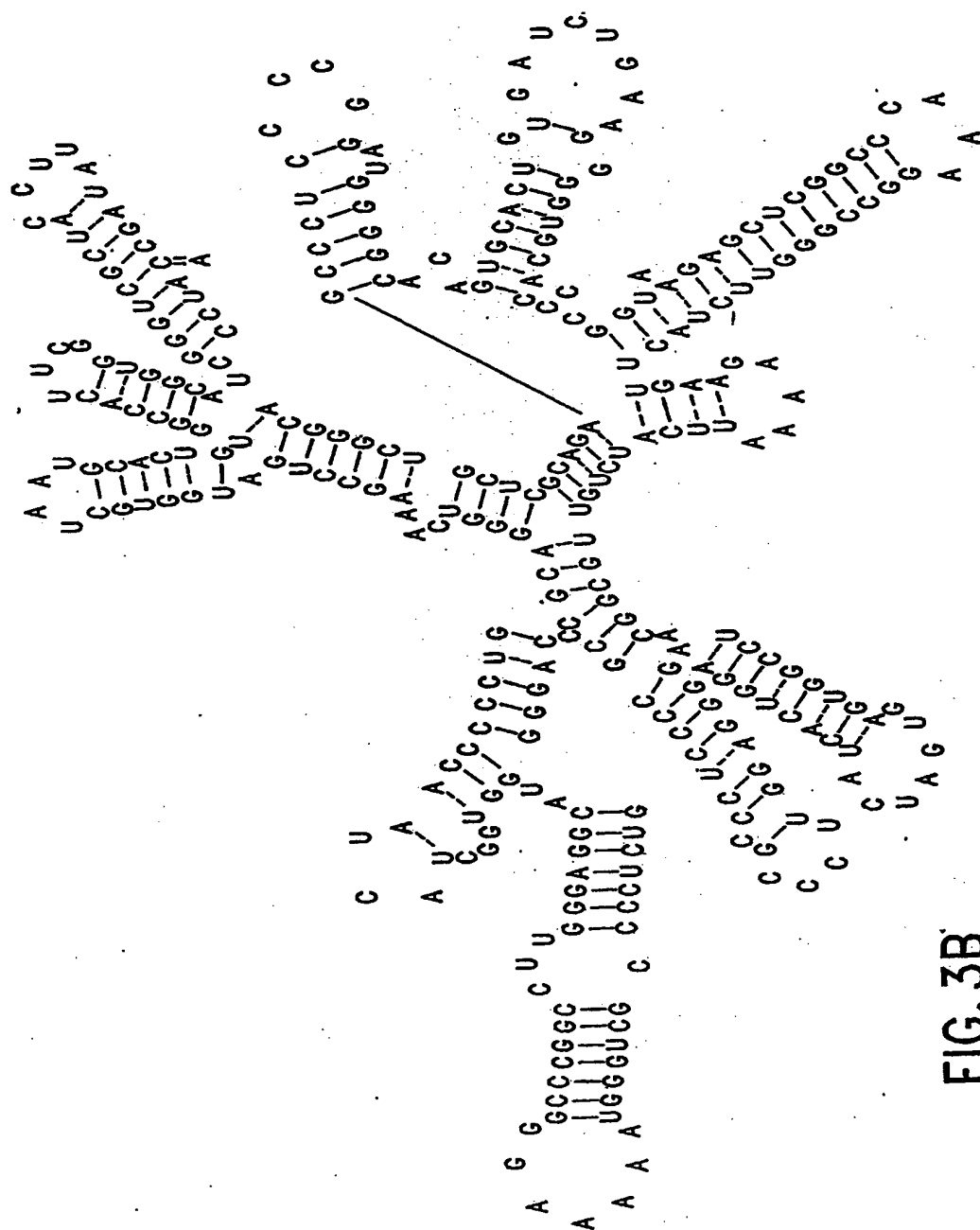
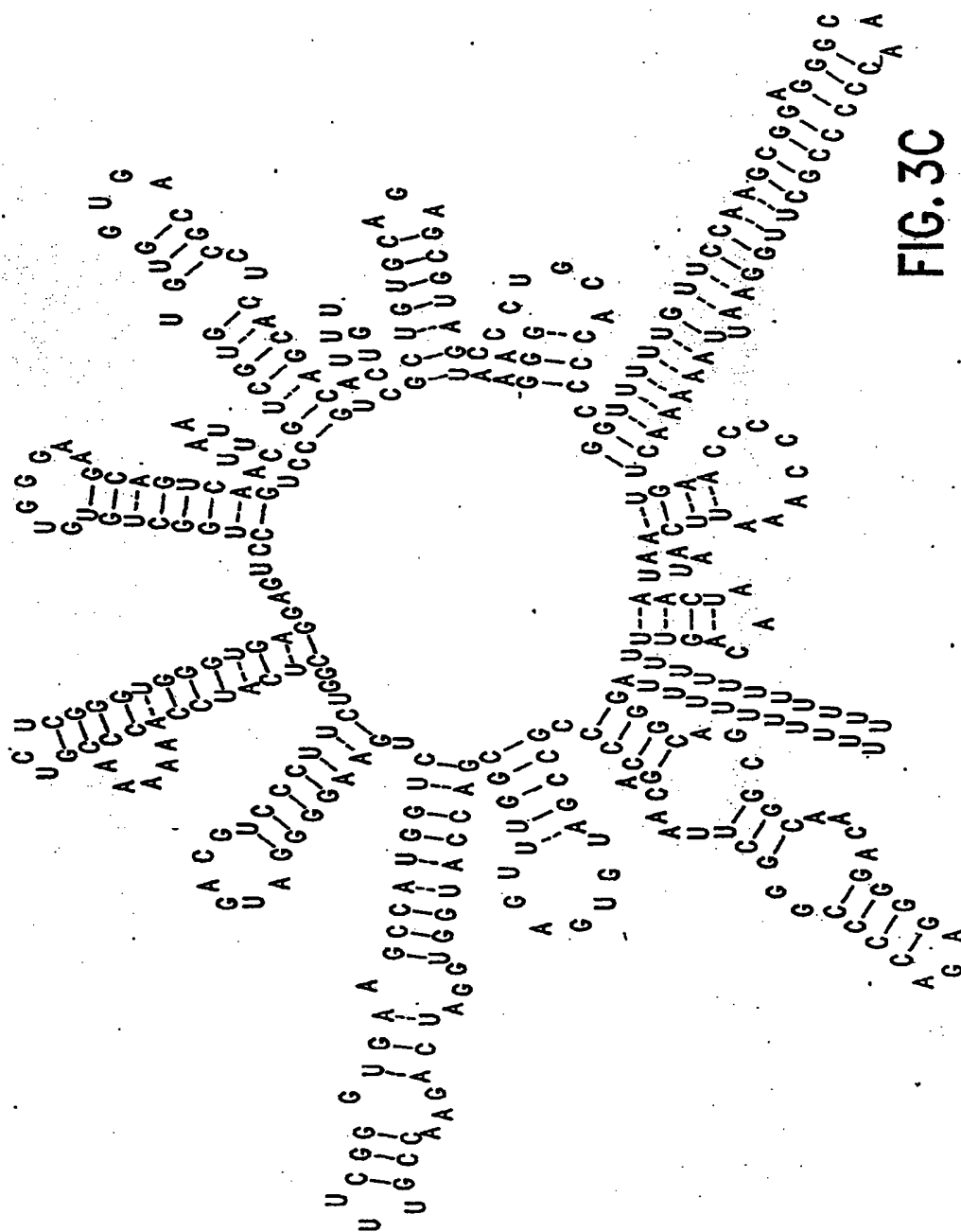


FIG. 3B





RELATIVE GBV-C RNA CONCENTRATION IN CELL CULTURE SUPERNATANT FLUID.

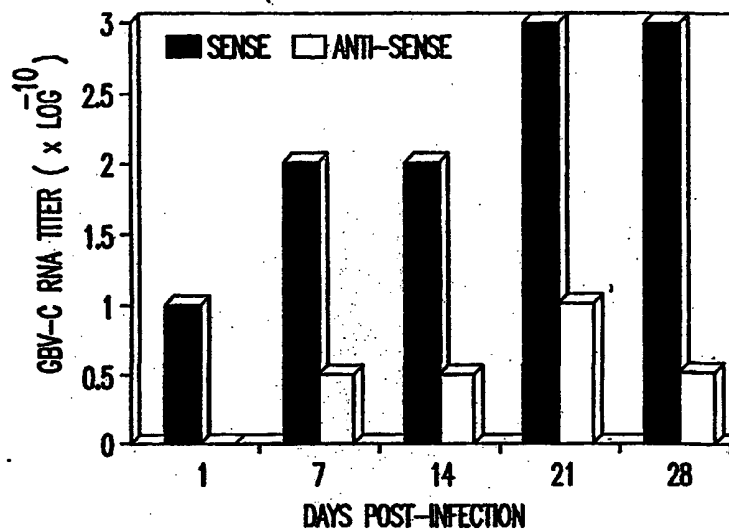


FIG. 4A

RELATIVE GBV-C RNA CONCENTRATION IN CELL LYSATE.

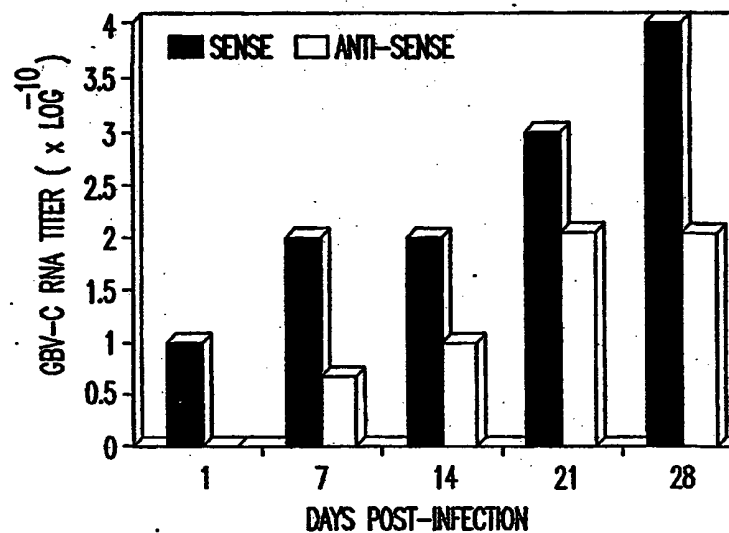


FIG. 4B

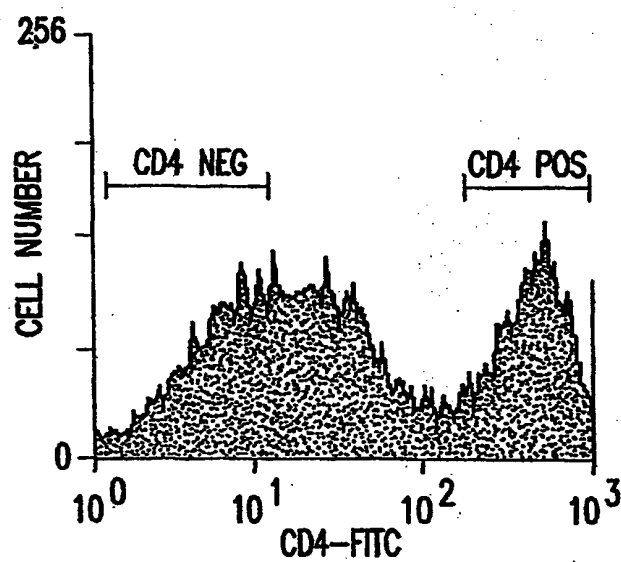
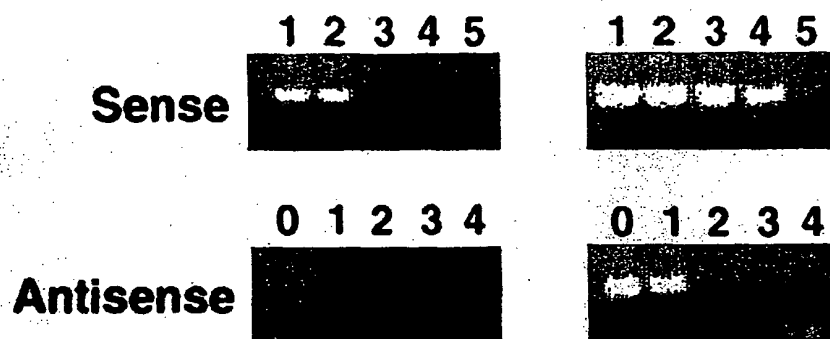
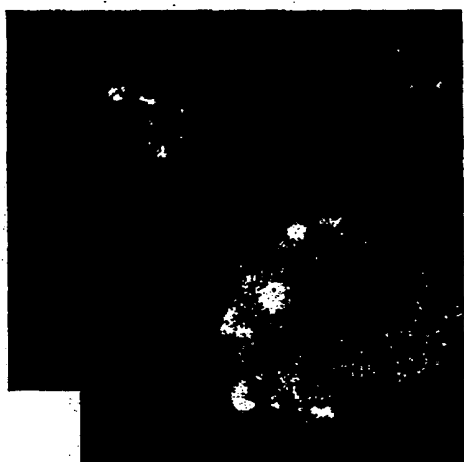


FIG.5



**FIG. 6A**



**FIG. 6B**



**FIG. 6C**



**FIG. 6D**

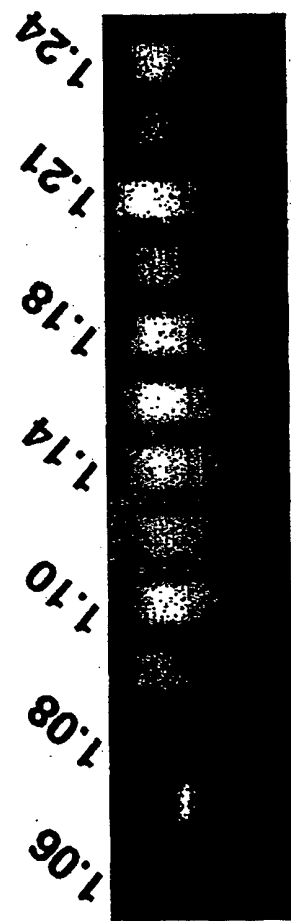


FIG. 7A

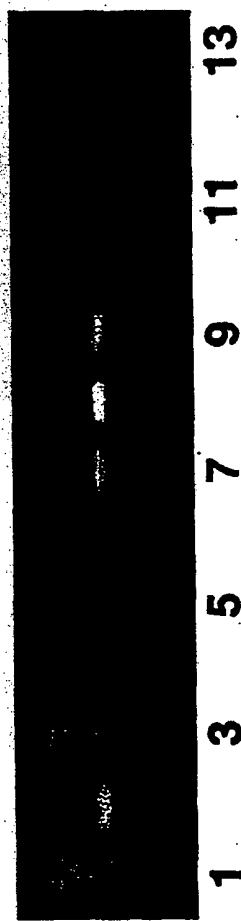


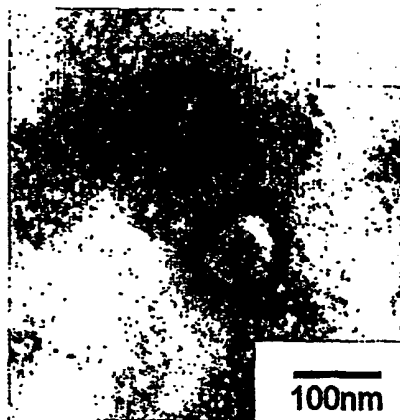
FIG. 7B



**FIG.8A**



**FIG.8B**



**FIG.8C**

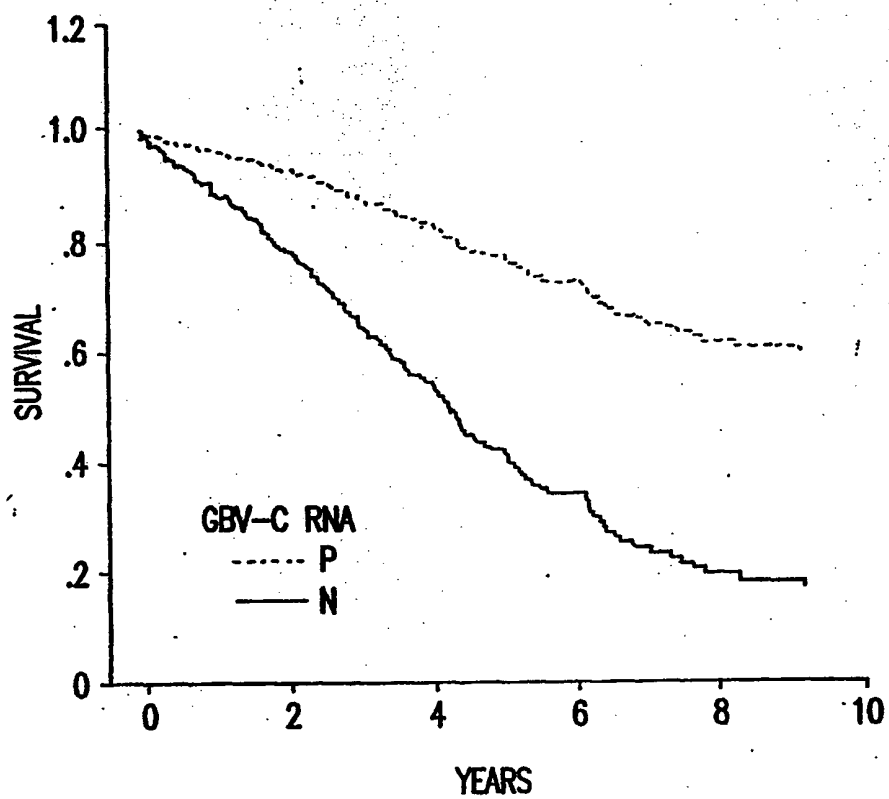


FIG.9

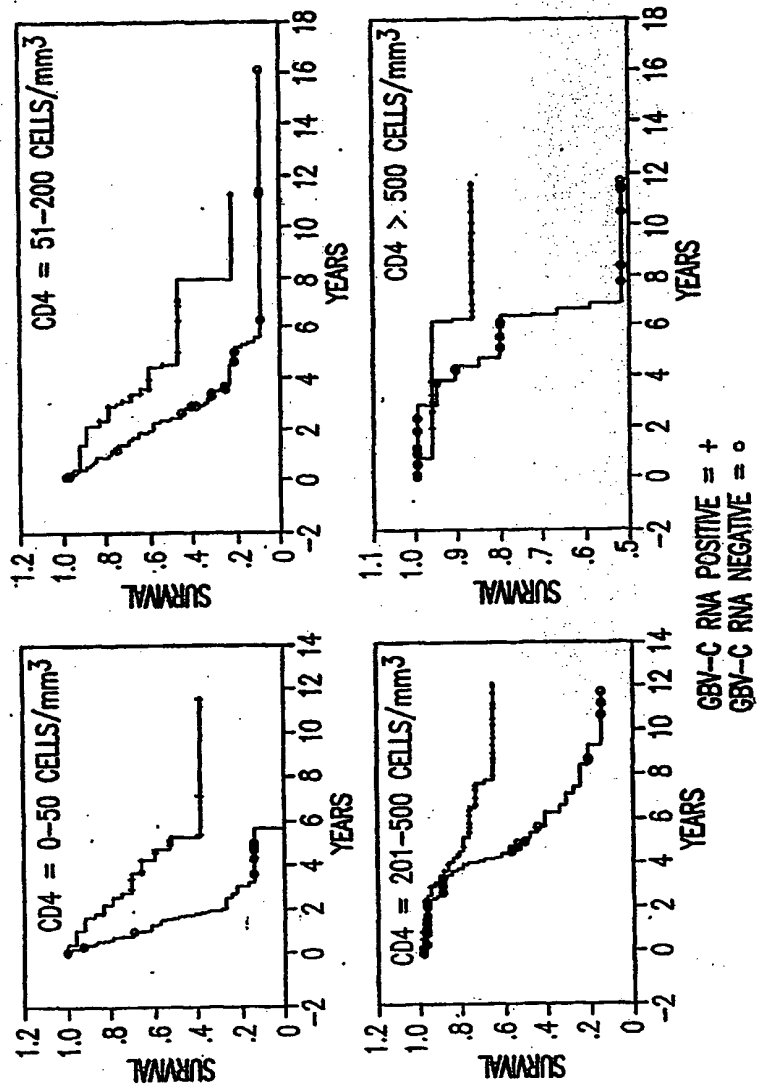


FIG.10

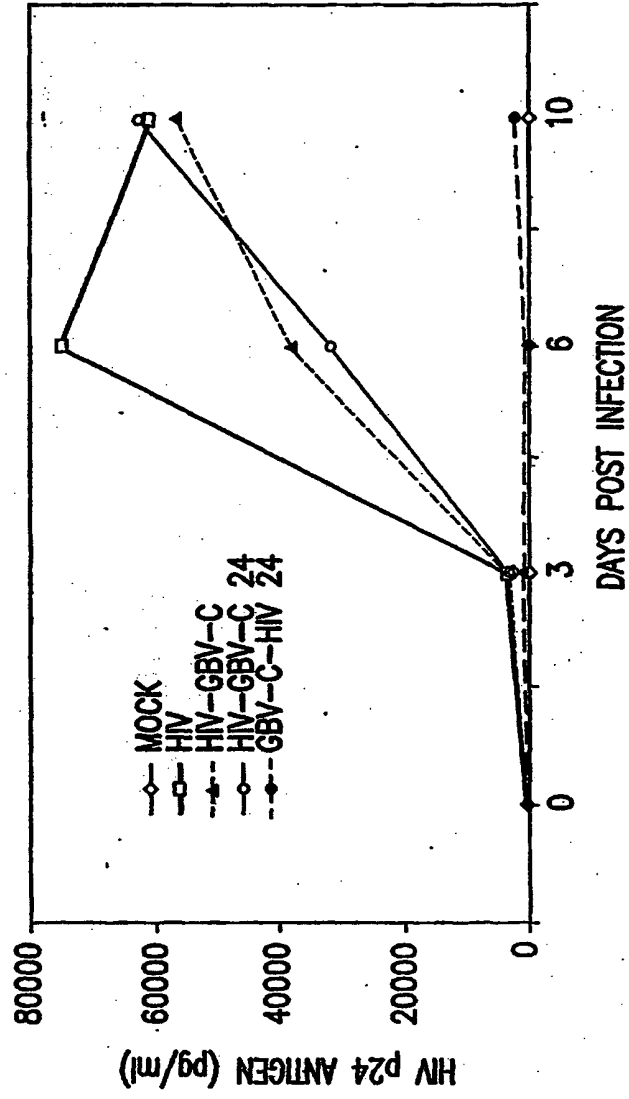


FIG. 11

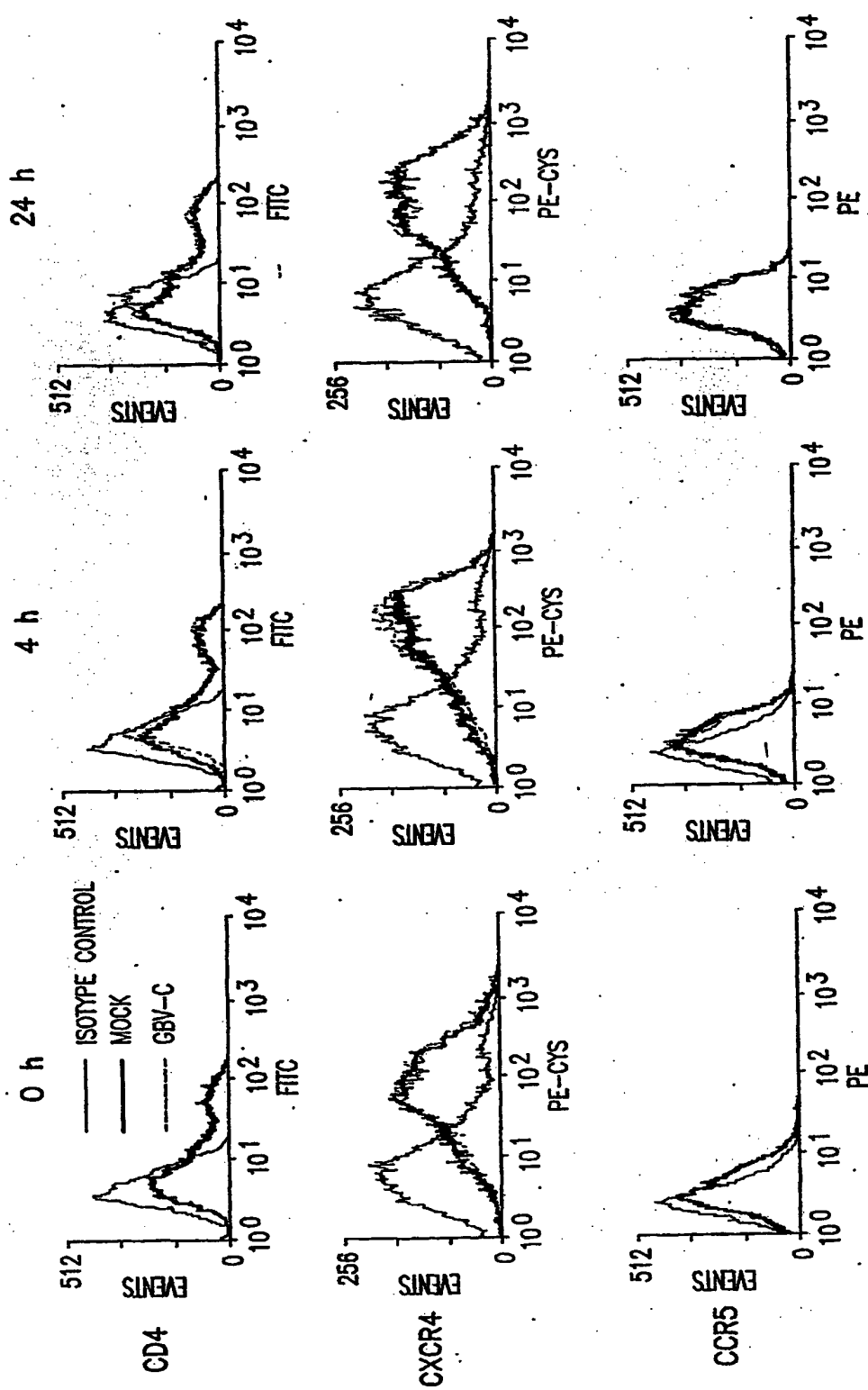


FIG. 12

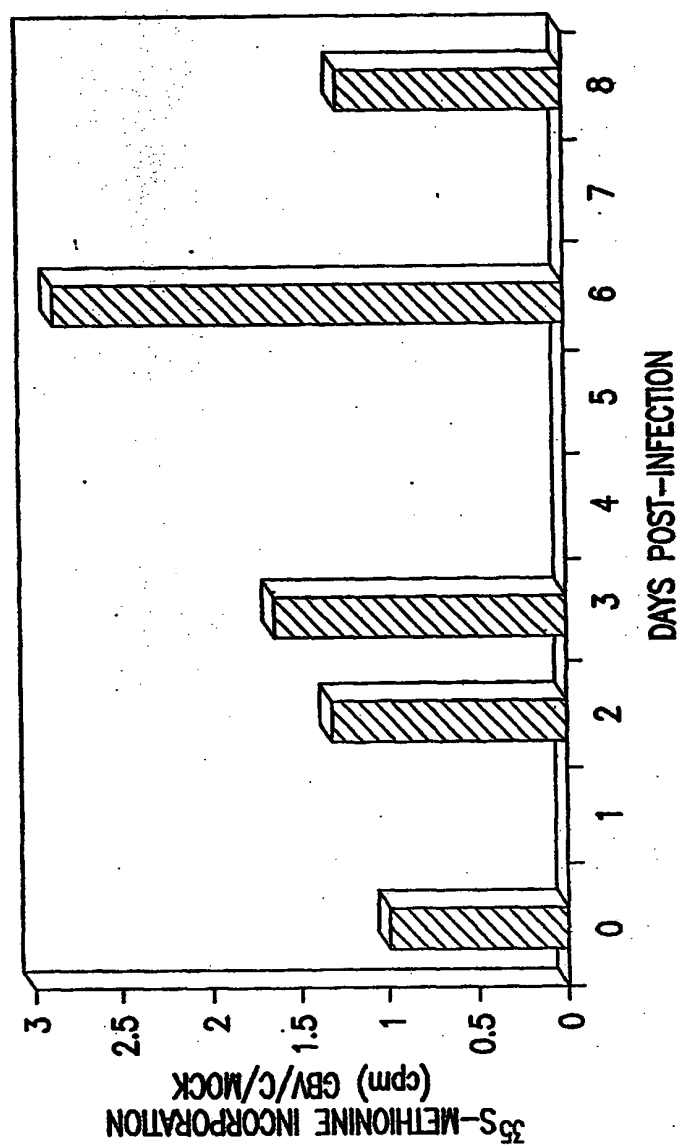


FIG. 13

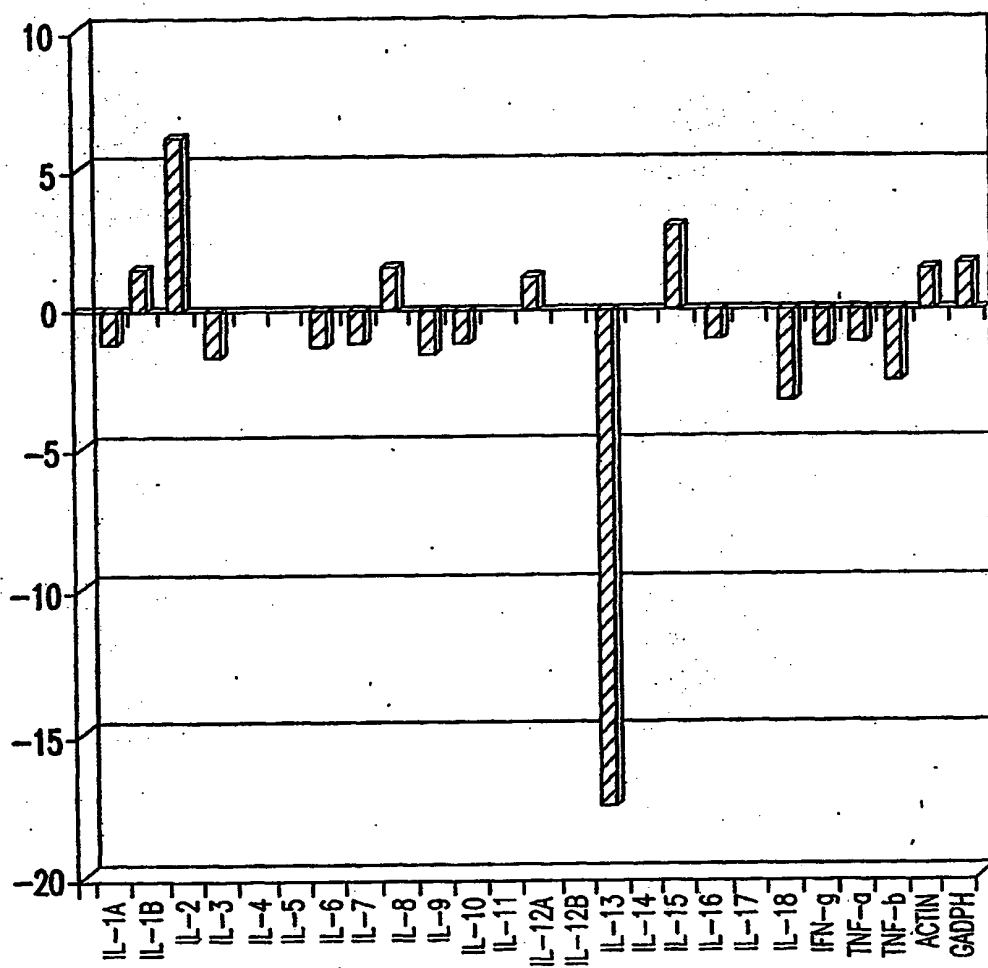


FIG. 14

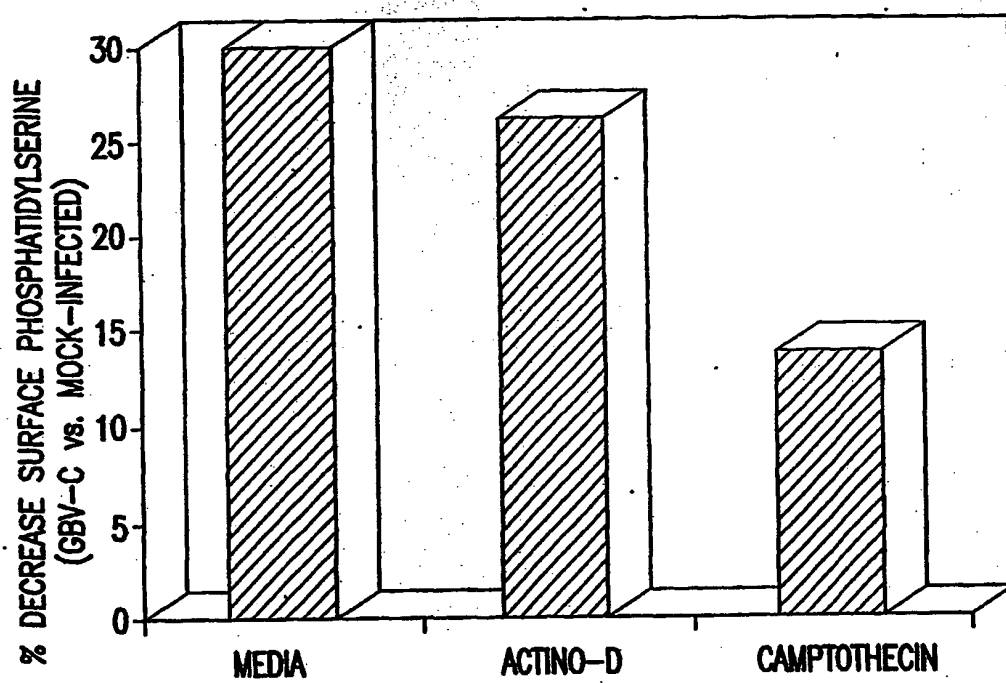


FIG. 15

Figure 4.<sup>16</sup>

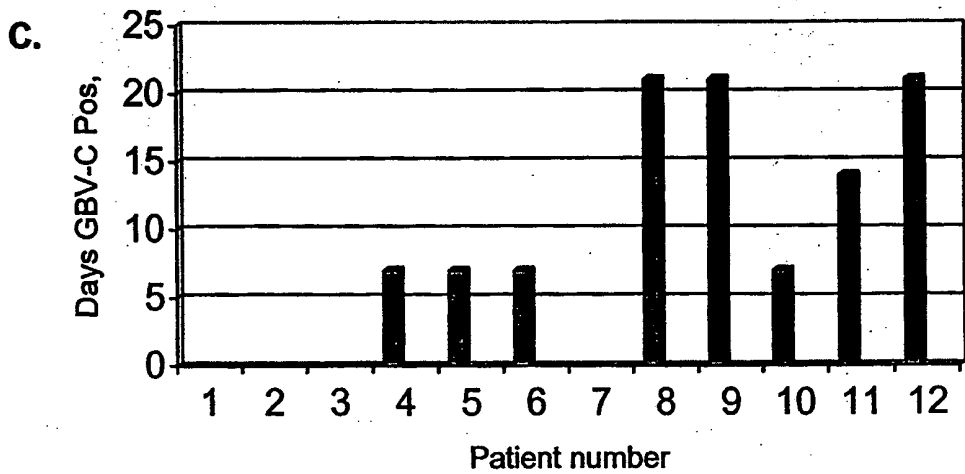
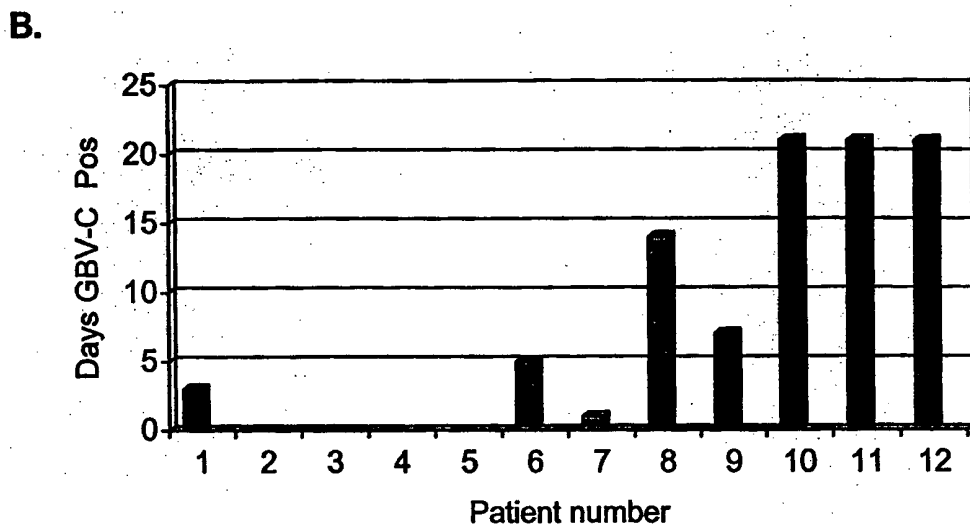
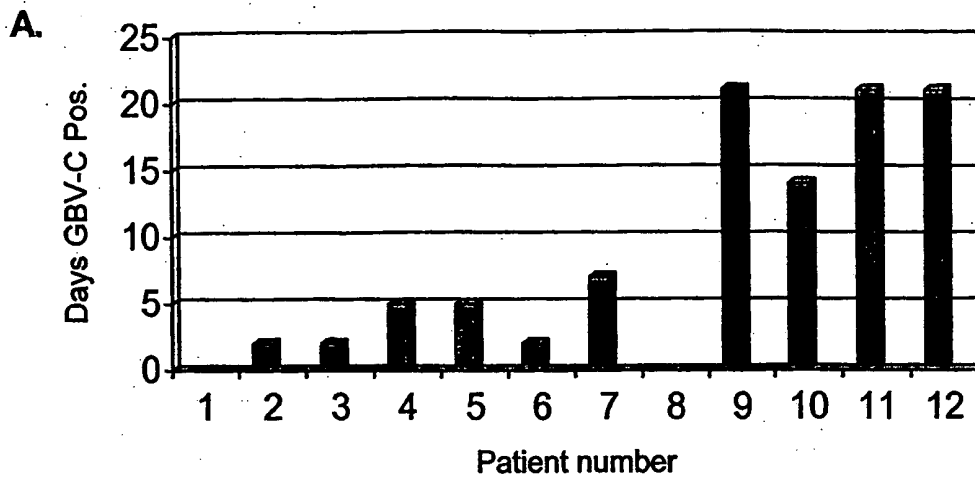
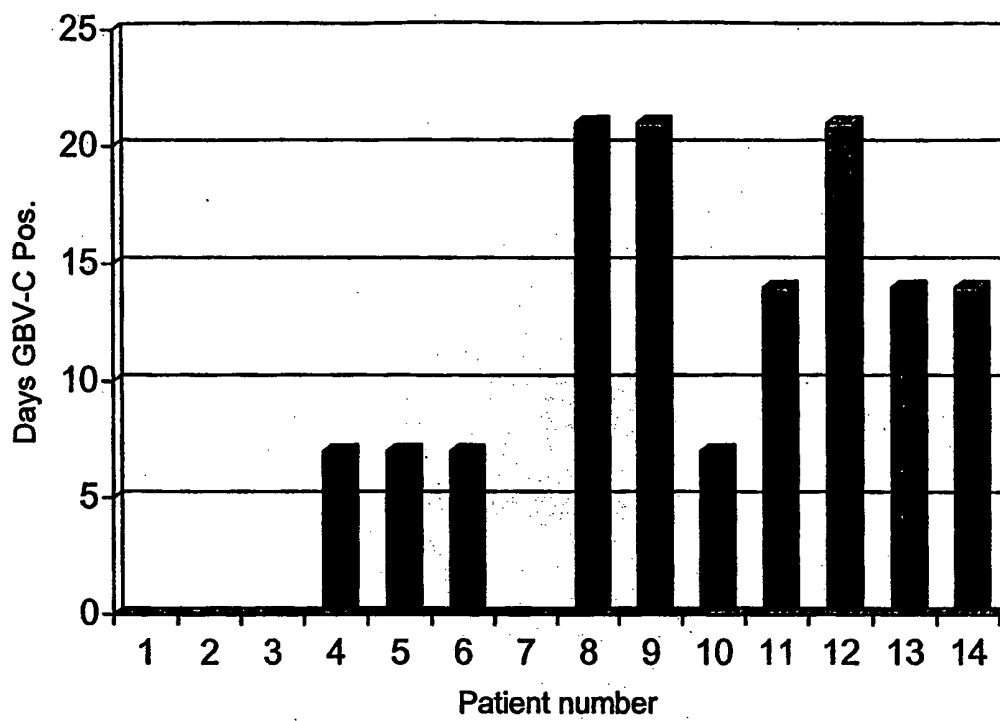
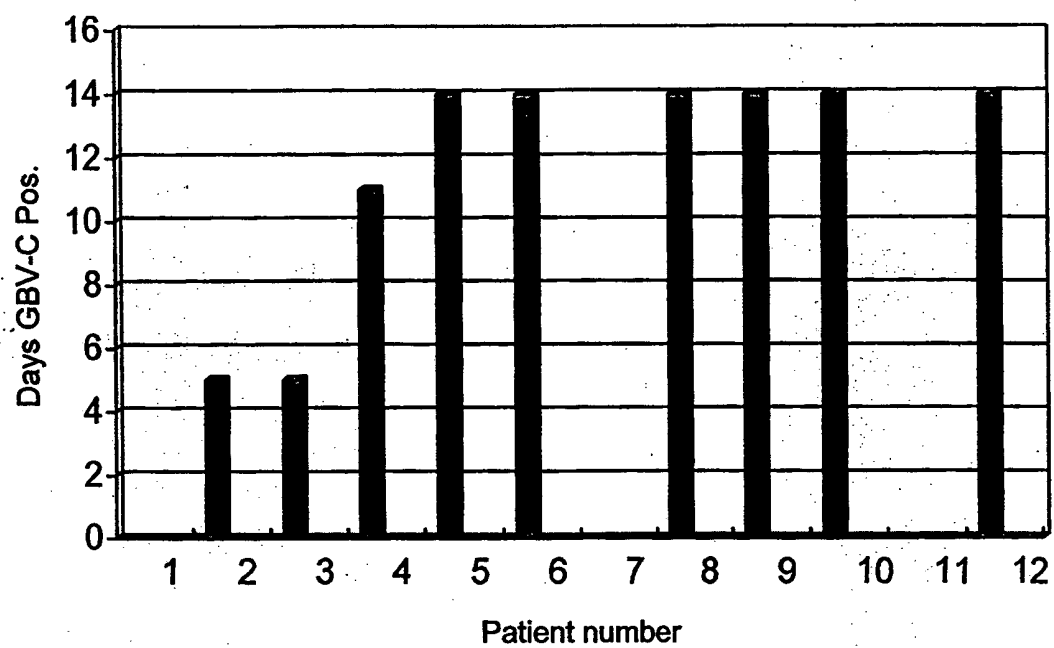


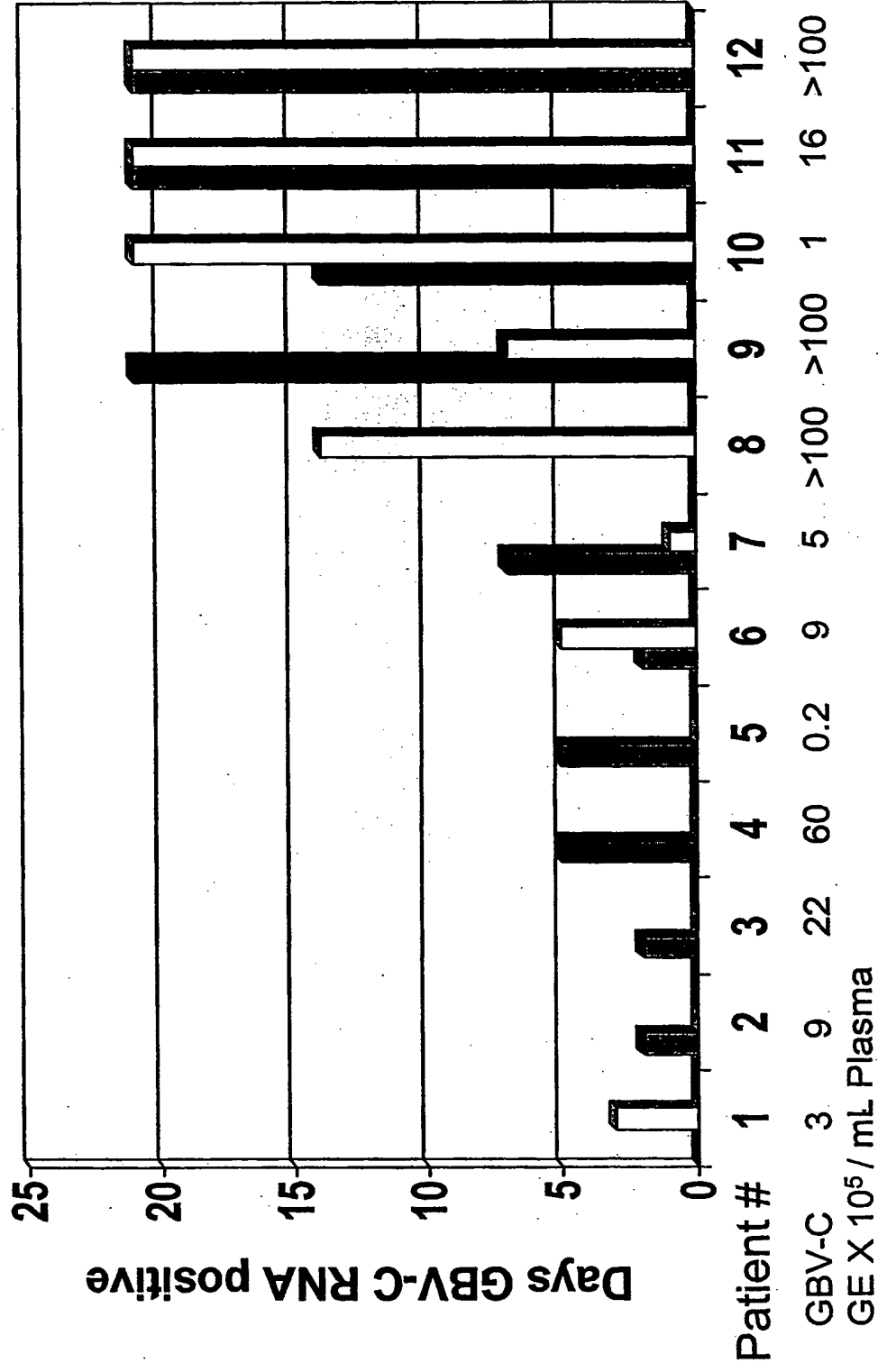
Figure 2.



18  
Figure 3.



**Figure 1A: GBV-C replication in PBMC cultures**

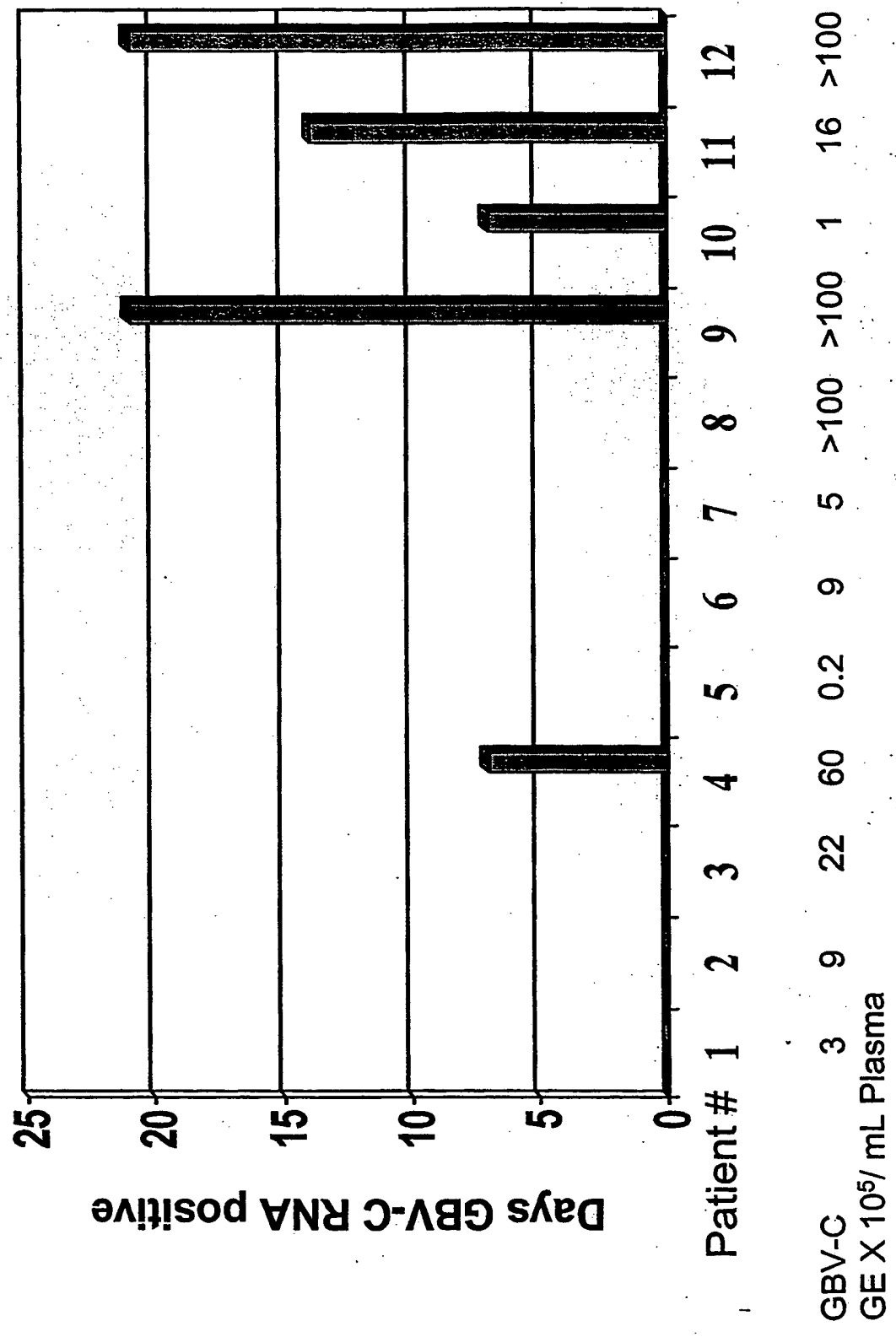


Open bars = patient PBMCs cultured with healthy donor PBMCs

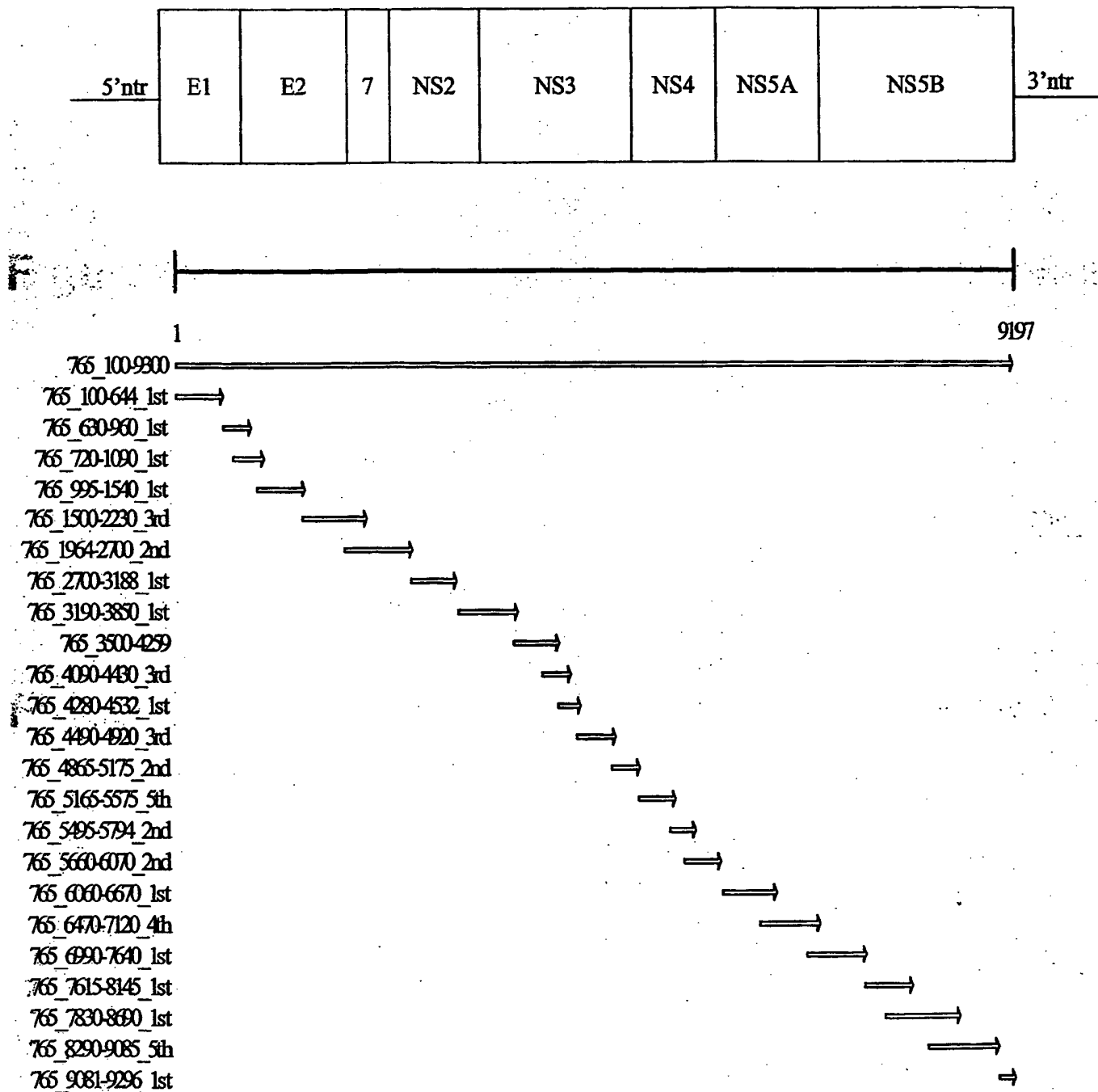
Solid bars = patient PBMCs cultured without donor PBMCs

19

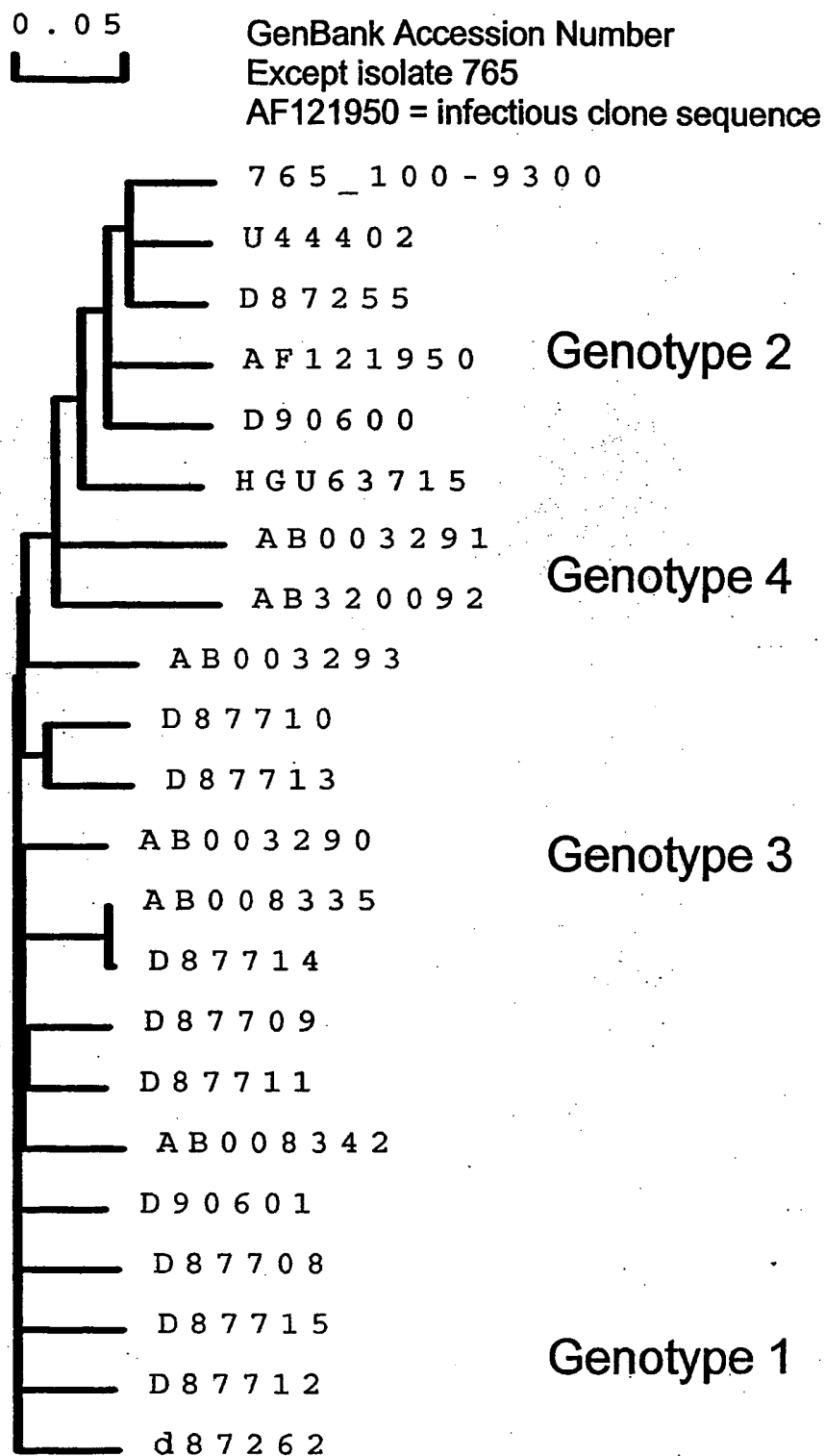
**Figure 1B: Plasma GBV-C infection in donor PBMCs**



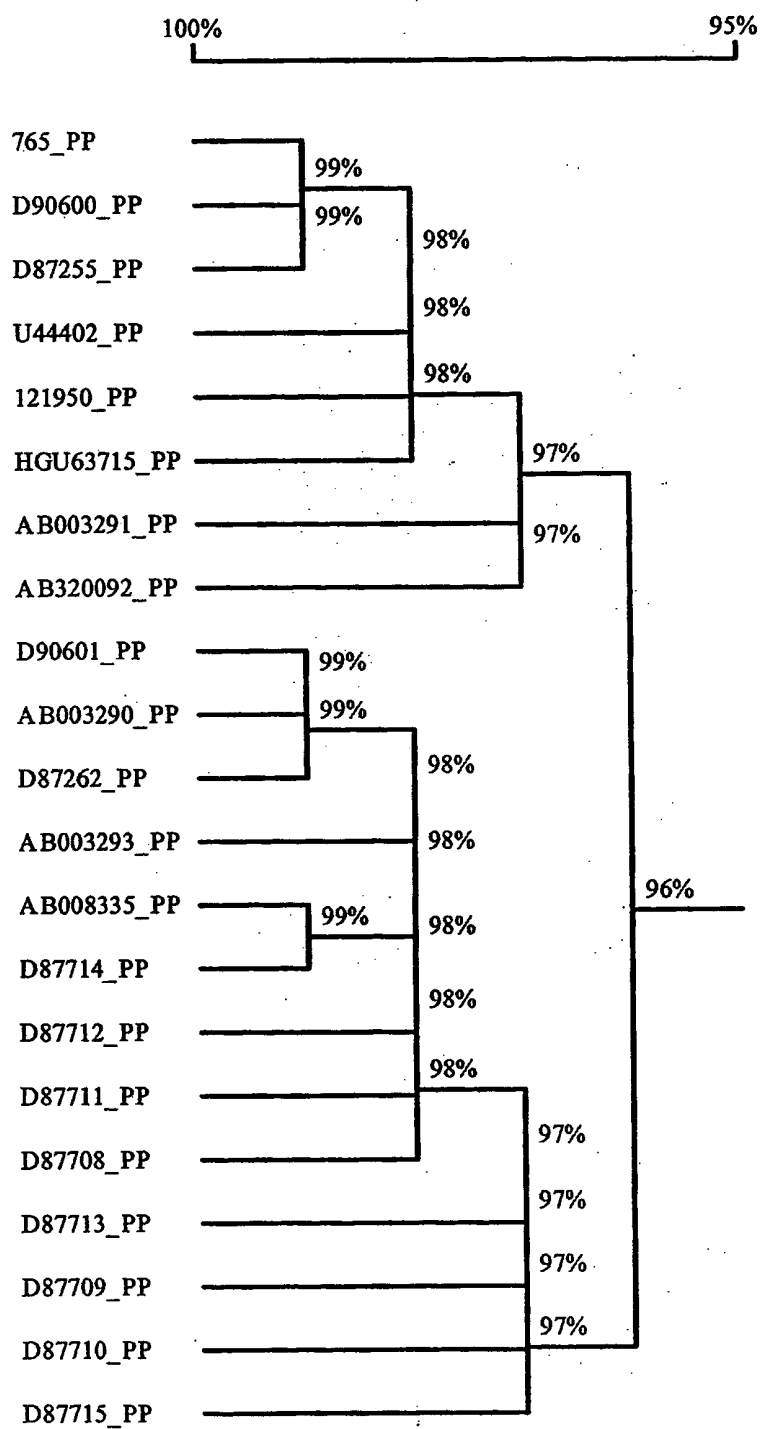
<sup>20</sup>  
**Figure 2: Sequence of full-length GBV-C genome**  
**(patient #12 – isolate 765)**



21  
**Figure 3: Phylogenetic Tree of GBV-C Nucleotide Sequences**



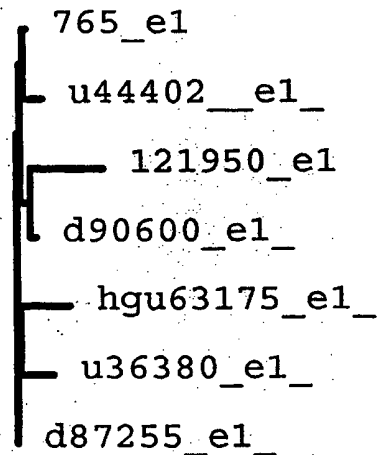
22  
**Figure 4: GBV-C Polyprotein (pp) Phylogenetic Tree**



# GBV-C phylogenetic relationships by protein coding region.

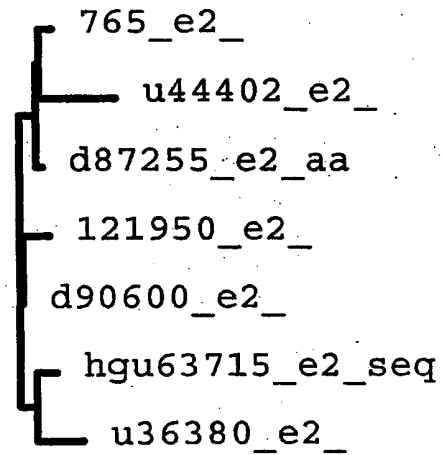
<sup>23</sup>  
**Figure 5A: E1**

0.05



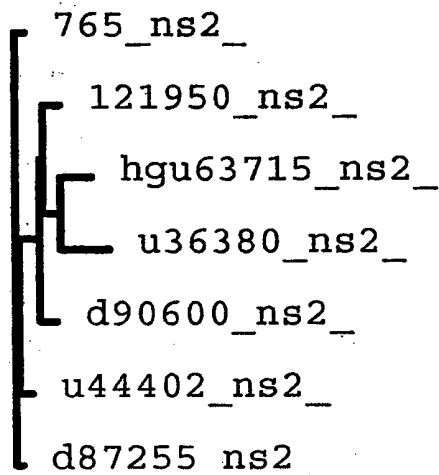
<sup>23</sup>  
**Figure 5B: E2**

0.05



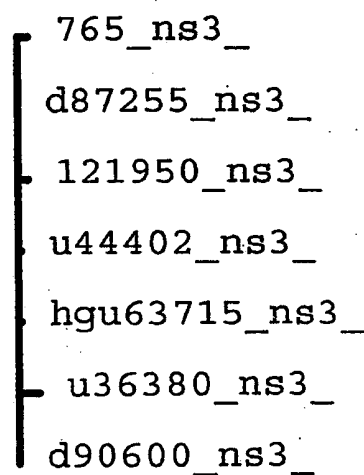
<sup>23</sup>  
**Figure 5C: NS2**

0.05



<sup>23</sup>  
**Figure 5D: NS3**

0.05



# GBV-C phylogenetic relationships by protein coding region.

<sup>23</sup>  
**Figure 5E: NS4**

0.05



765\_ns4a\_  
d87255\_ns4a\_  
u44402\_ns4a\_  
121950\_ns4a\_  
hgu63715\_ns4a\_  
u36380\_ns4a\_  
d90600\_ns4a\_

<sup>23</sup>  
**Figure 5F: NS5A**

0.05



765\_ns5a  
d87255\_ns5a\_  
121950\_ns5a\_  
u44402\_ns5a\_  
hgu63715\_ns5a\_  
d90600\_ns5a\_

<sup>23</sup>  
**Figure 5G: NS5B**

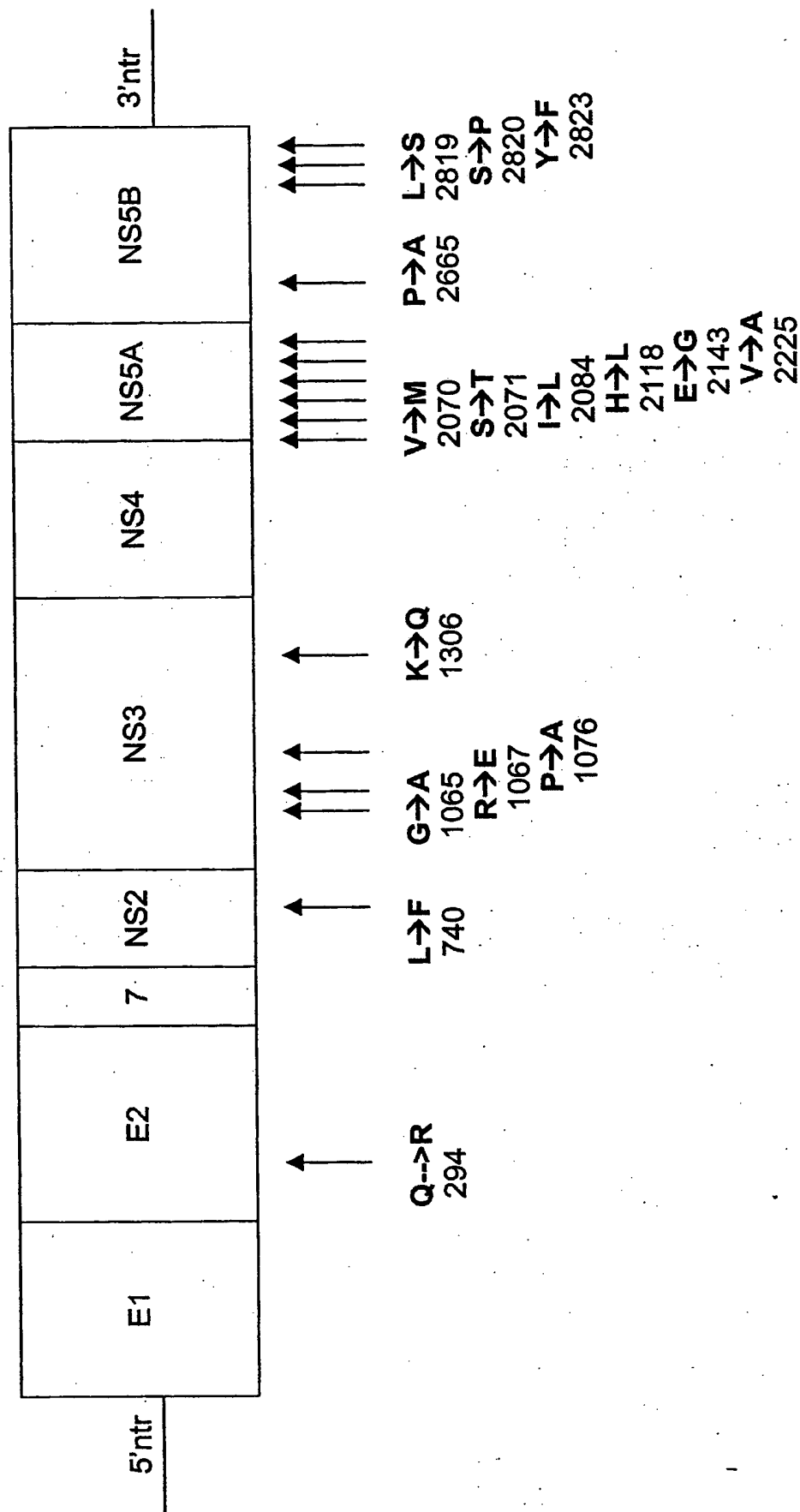
0.05



765\_ns5b\_  
u44402\_ns5b\_  
121950\_ns5b\_  
d90600\_ns5b\_  
d87255\_ns5b\_  
hgu63715\_ns5b\_

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**Figure 6: GBV-C 765 compared with 21 full-length GBV-C genomes: Unique amino acid mutations**



**Figure 7:** Amino acid substitutions in NS5A region of 765 vs. AF121950

|        |   |       |
|--------|---|-------|
| 121950 | VALVNREPKVDEVQGYVWDLWEWIMRQVRMVMARLALCPVSLPLWHCGEGWSGE          | ----- |
| 765    |   |       |
| 121950 | WLLDGHVESRCLCGCVITGDVLNGQLKDPVYSTKLCRHYWMGTVPVNMLGYGETSPLLA     | ----- |
| 765    |   |       |
| 121950 | SDTPKVVPGTSGWAEVVTPTTHVIRRTSAYKLLRQQILSAAVAEPYVVDGIPVSWDADA     | ----- |
| 765    |   |       |
| 121950 | RAPAMVYGPQGQSVTIDGERYTLPHQLRLRNVPSEVSSEVSIDIGTETEDSELTEADLP     | ----- |
| 765    |   |       |
| 121950 | AAALQAIENAAARILEPHIDVIMEDCSTPSLCGSSREMPVWGEDIPRTPSPALISVTESSPDE | ----- |
| 765    |   |       |
| 121950 | KTPSVSSSQEDTPSSDSFEVIQSEETAEGEESVFNVALSVLKALFPQSDATRKLTVMKMSCC  | ----- |
| 765    |   |       |
| 121950 | VEKSVTRFFSLGLTVADVASLCEMEIQNHTAYCDKVRTPLELQVGCLVGNEILT          | ----- |
| 765    |   |       |

Region Homologous to the HCV NS5A

Figure 1

Blood Sample

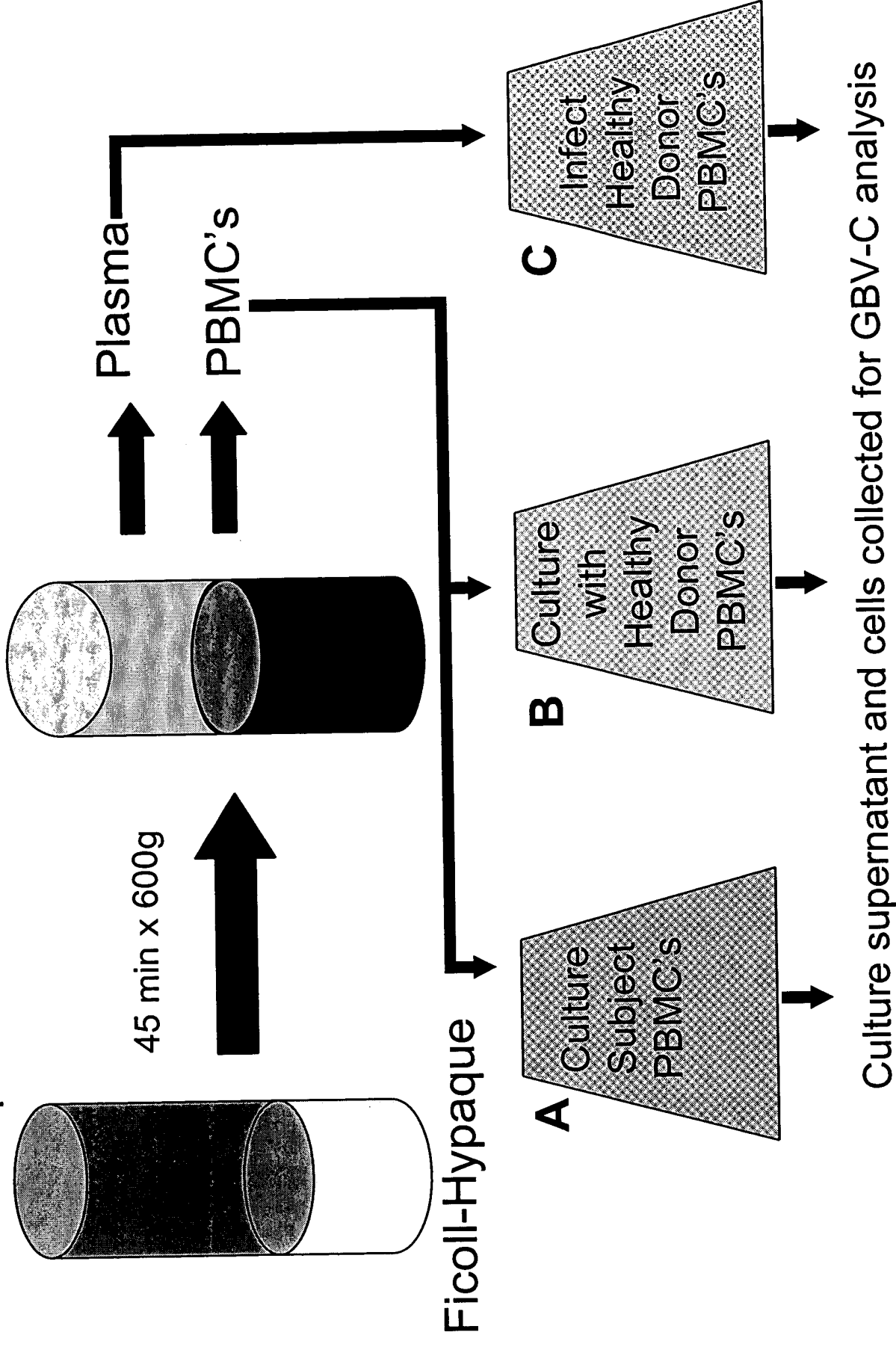


Figure 2A. 27A

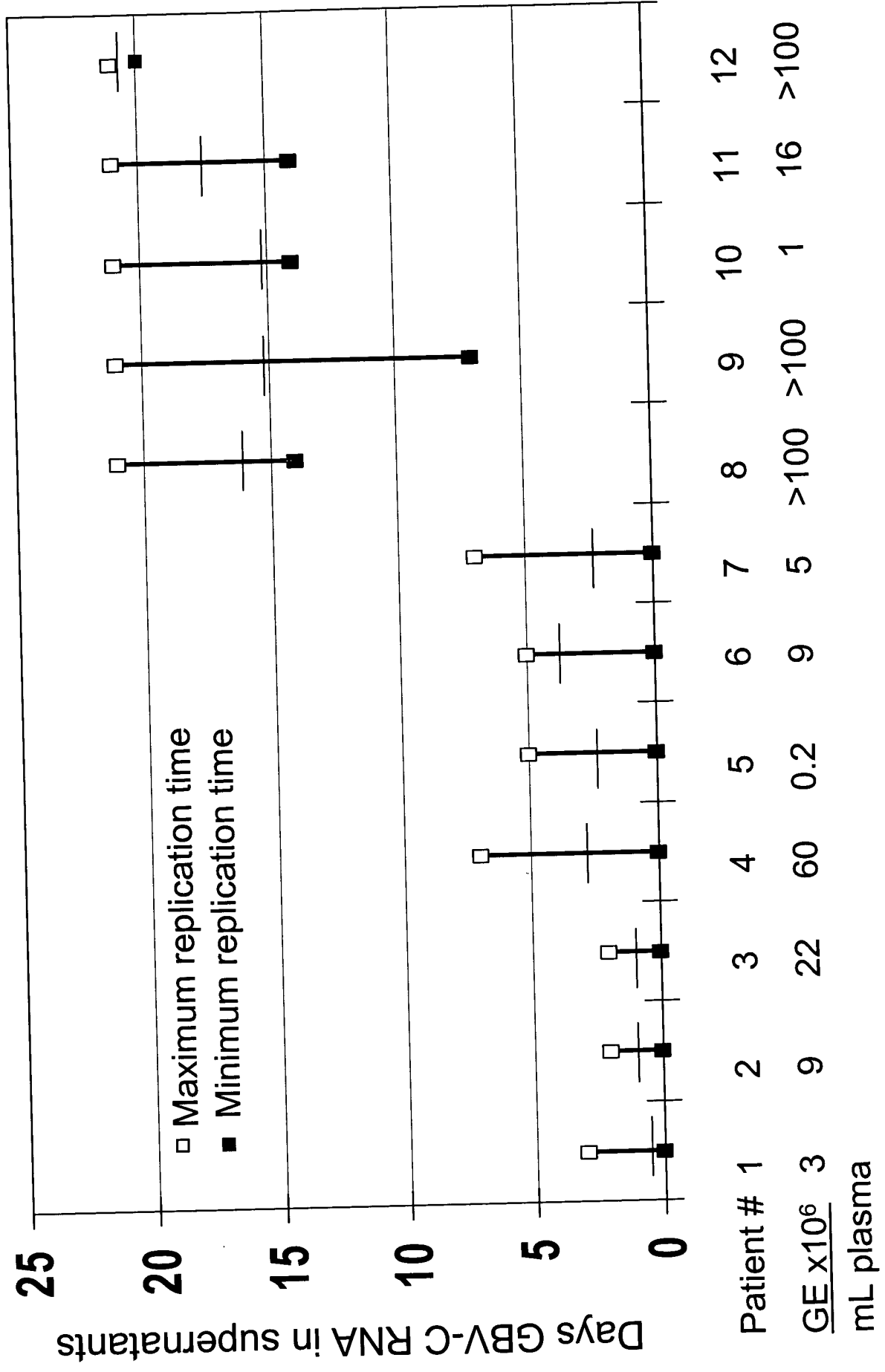


Figure 2B. 27B

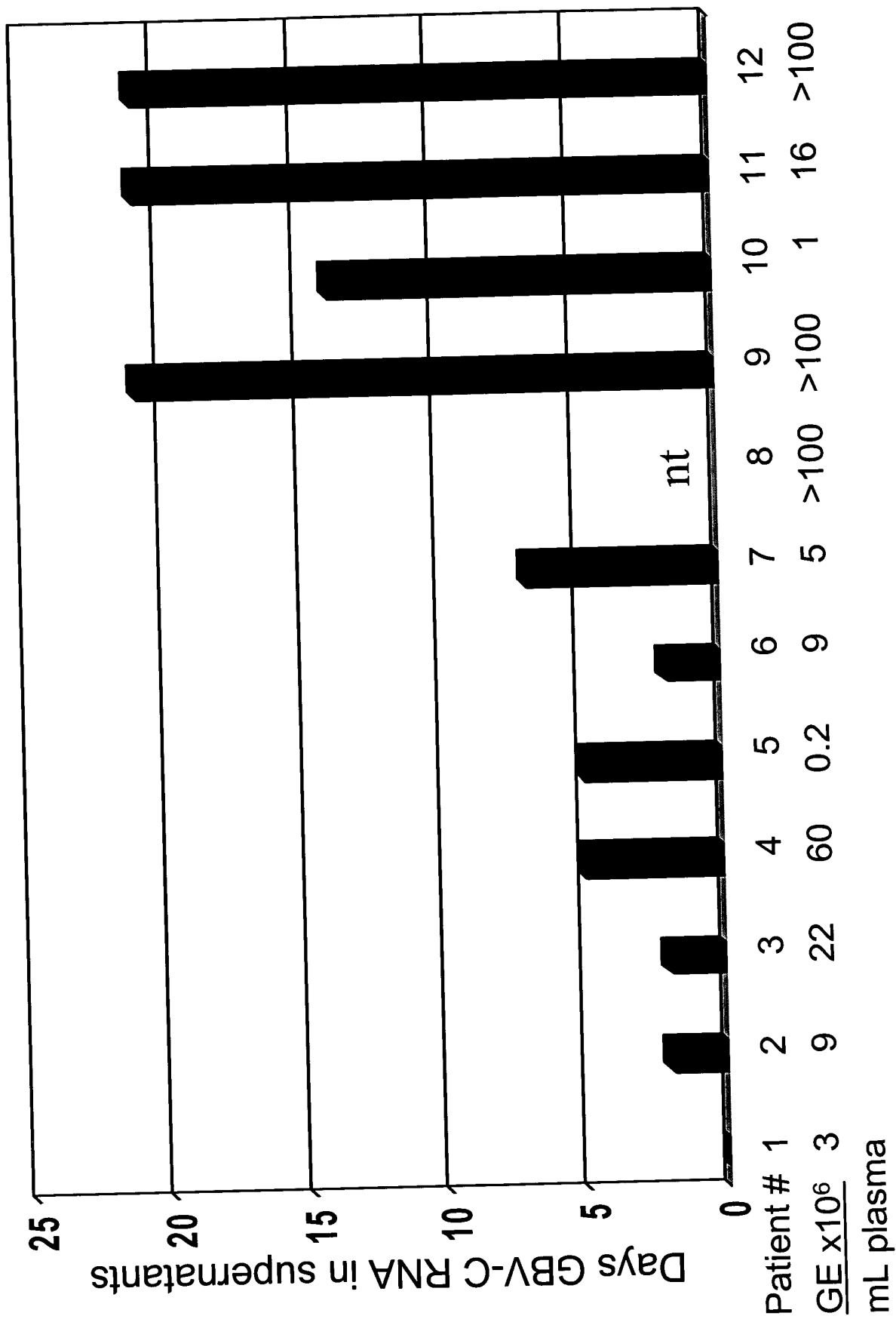


Figure 2C 27C

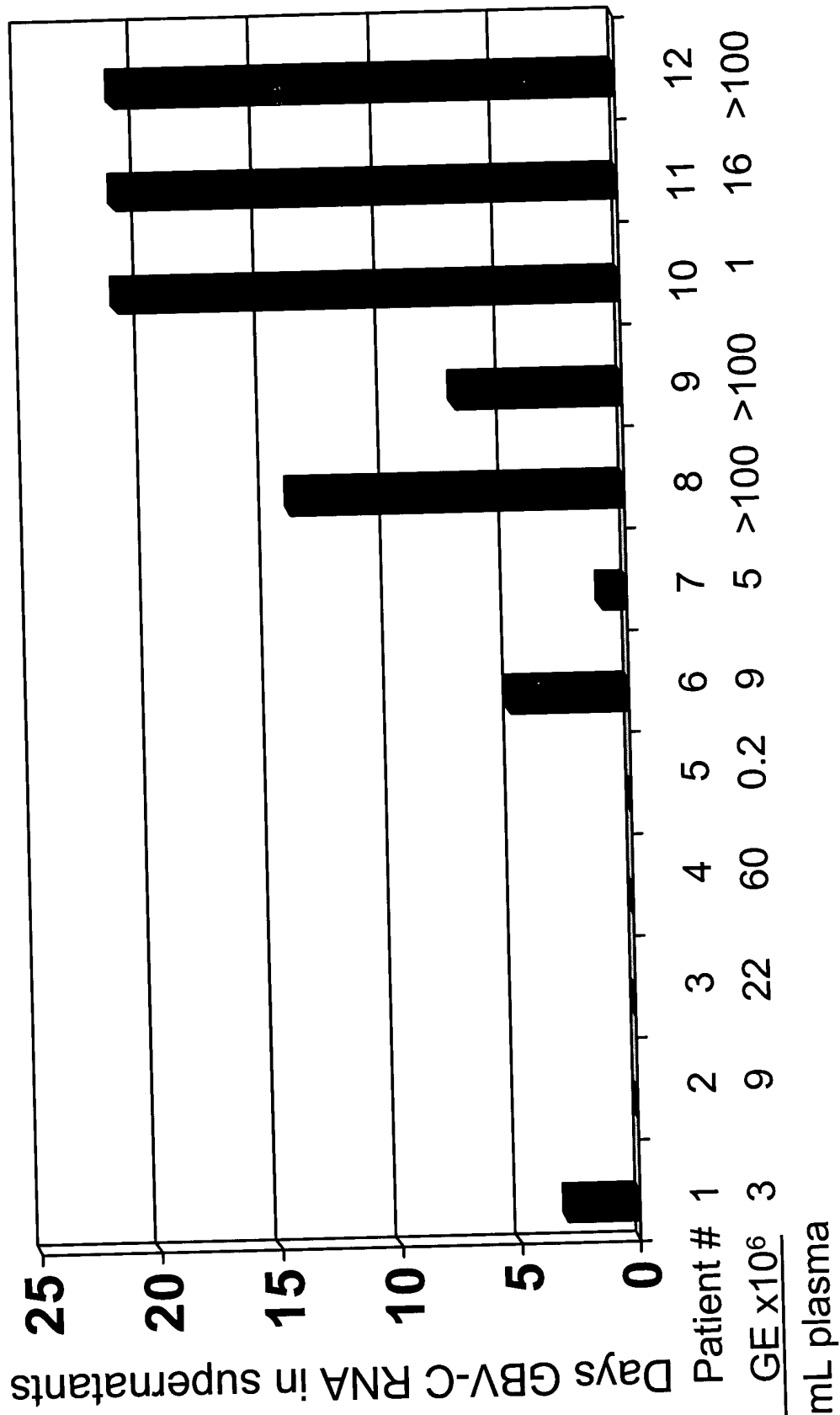


Figure 3 28

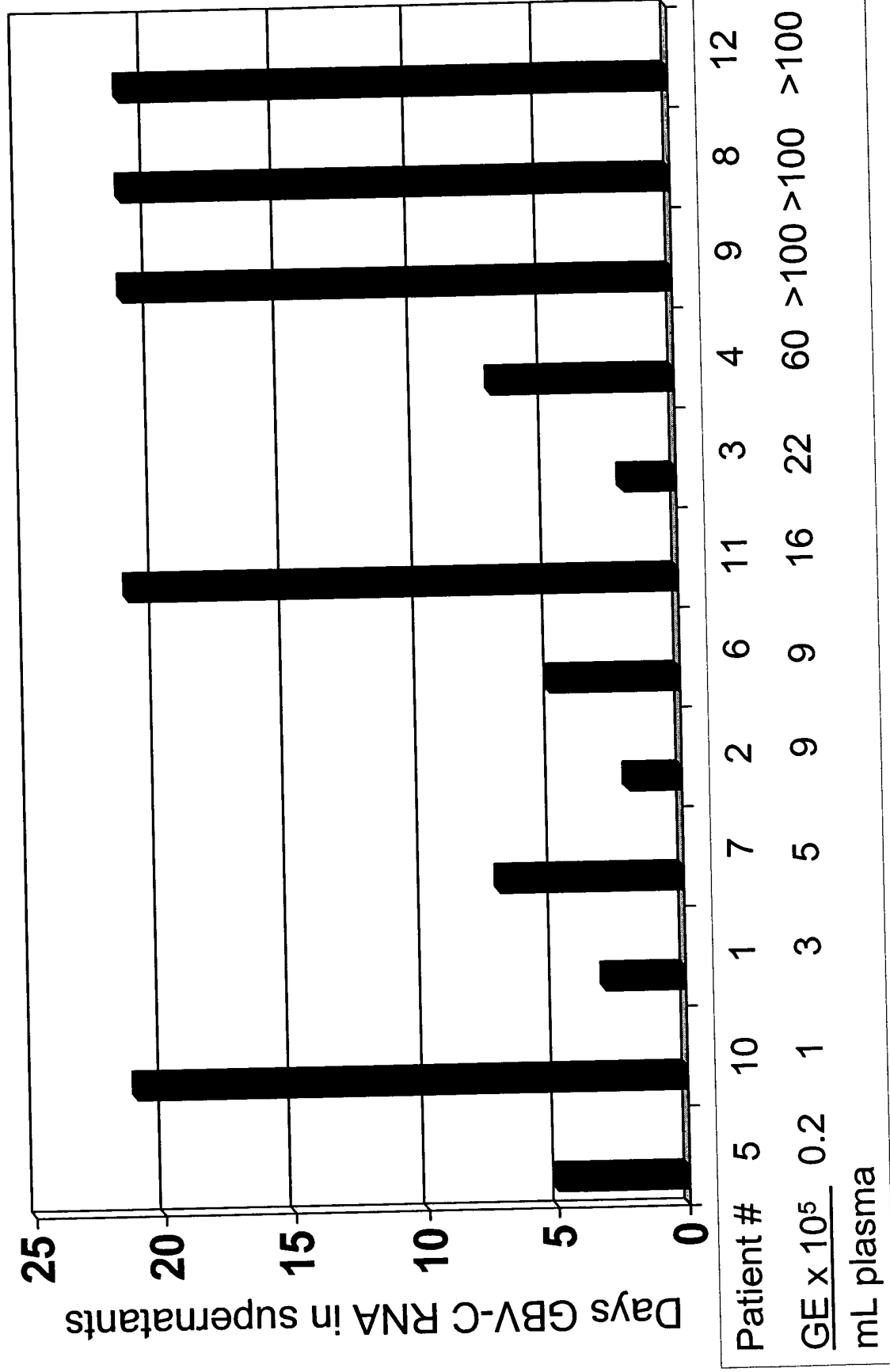


Figure 4 29

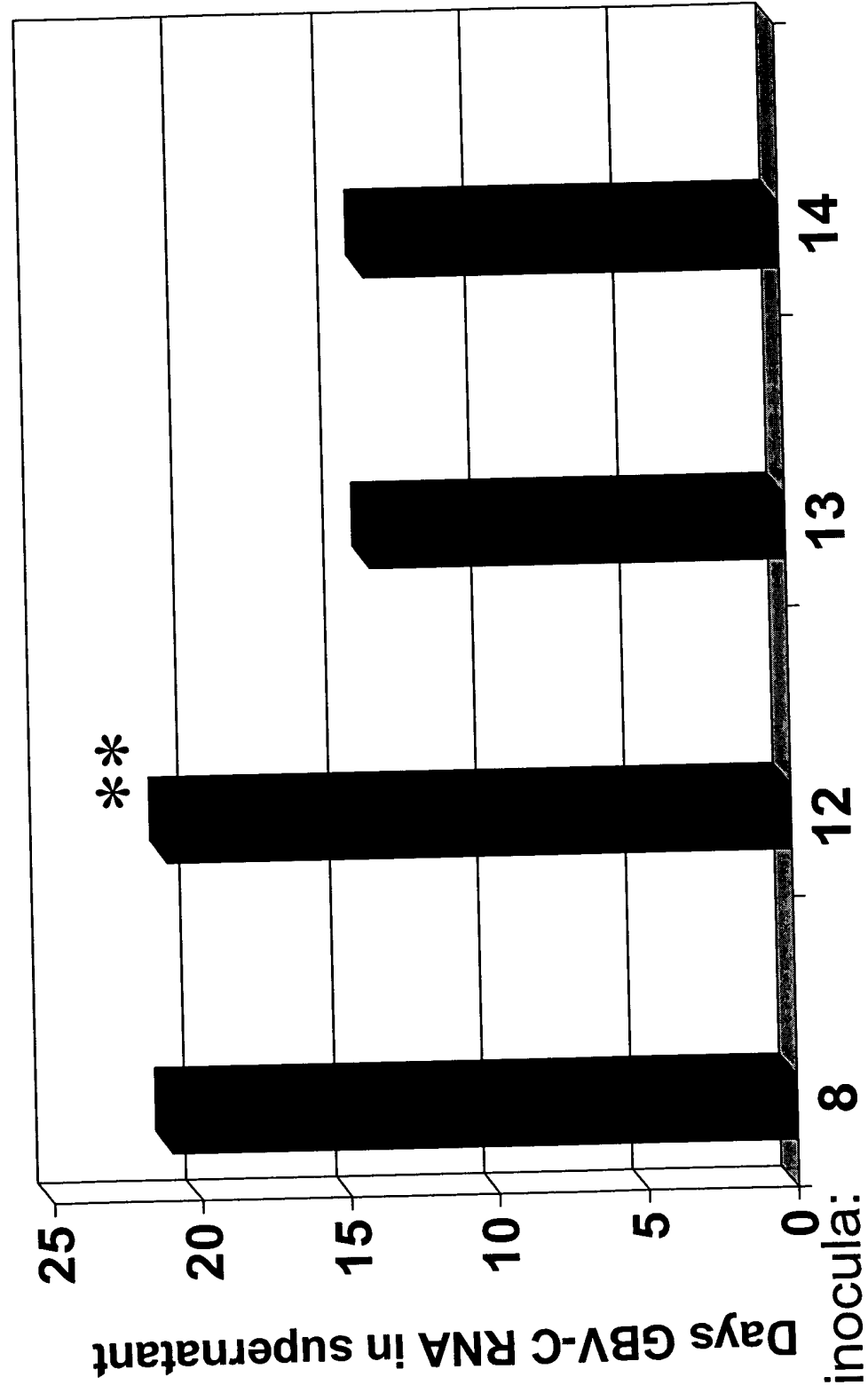
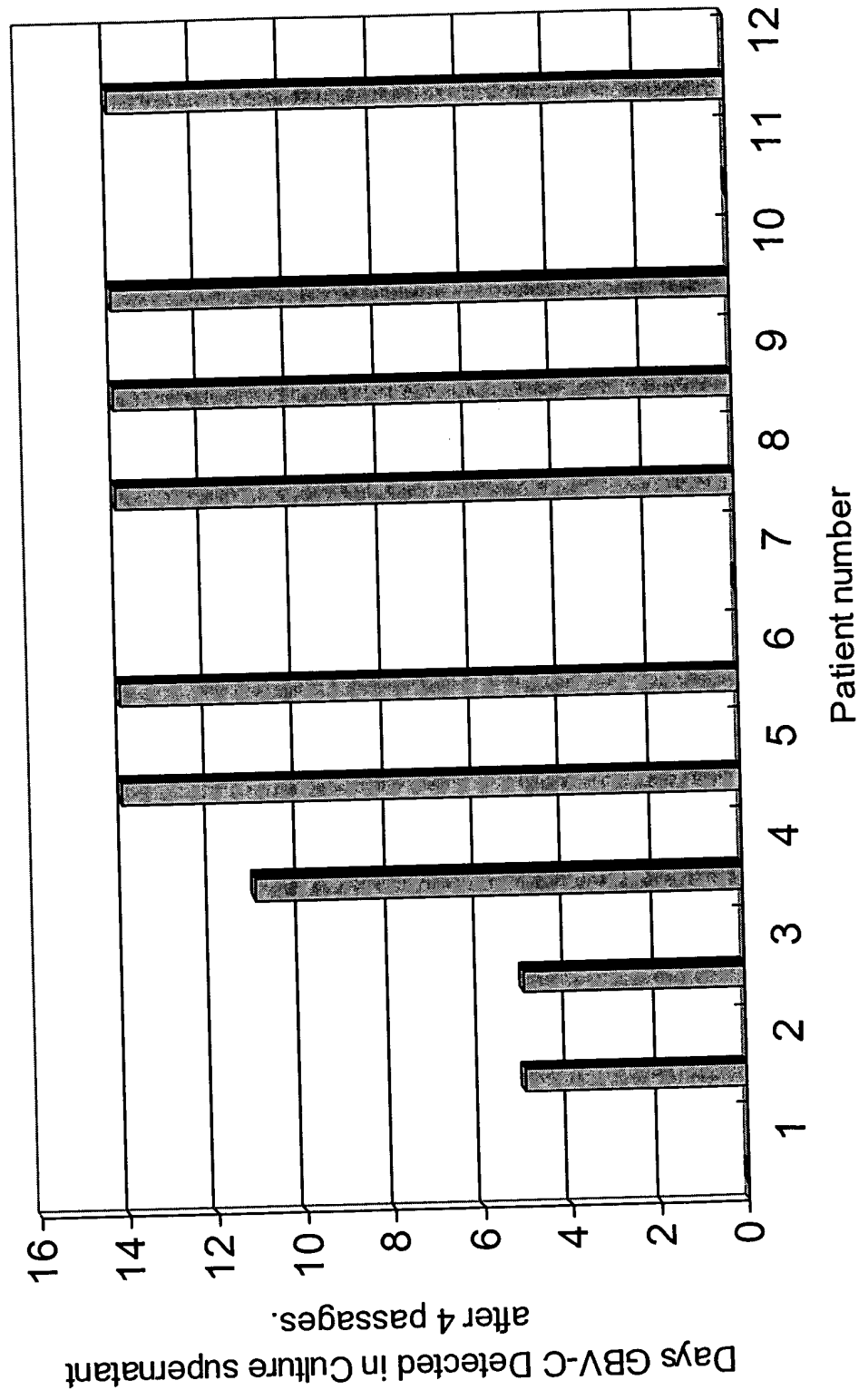


Figure 5.30



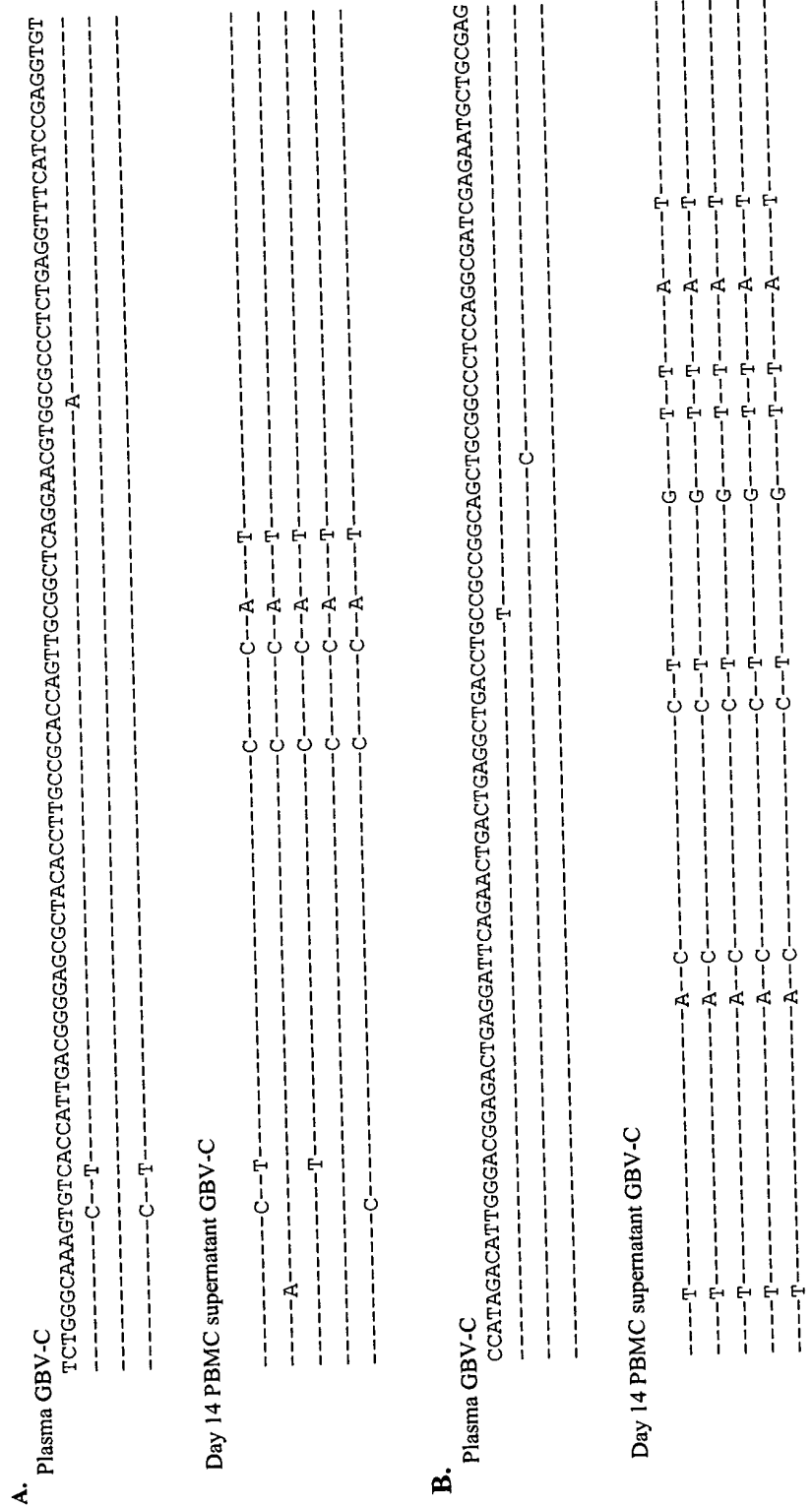


Figure X 32

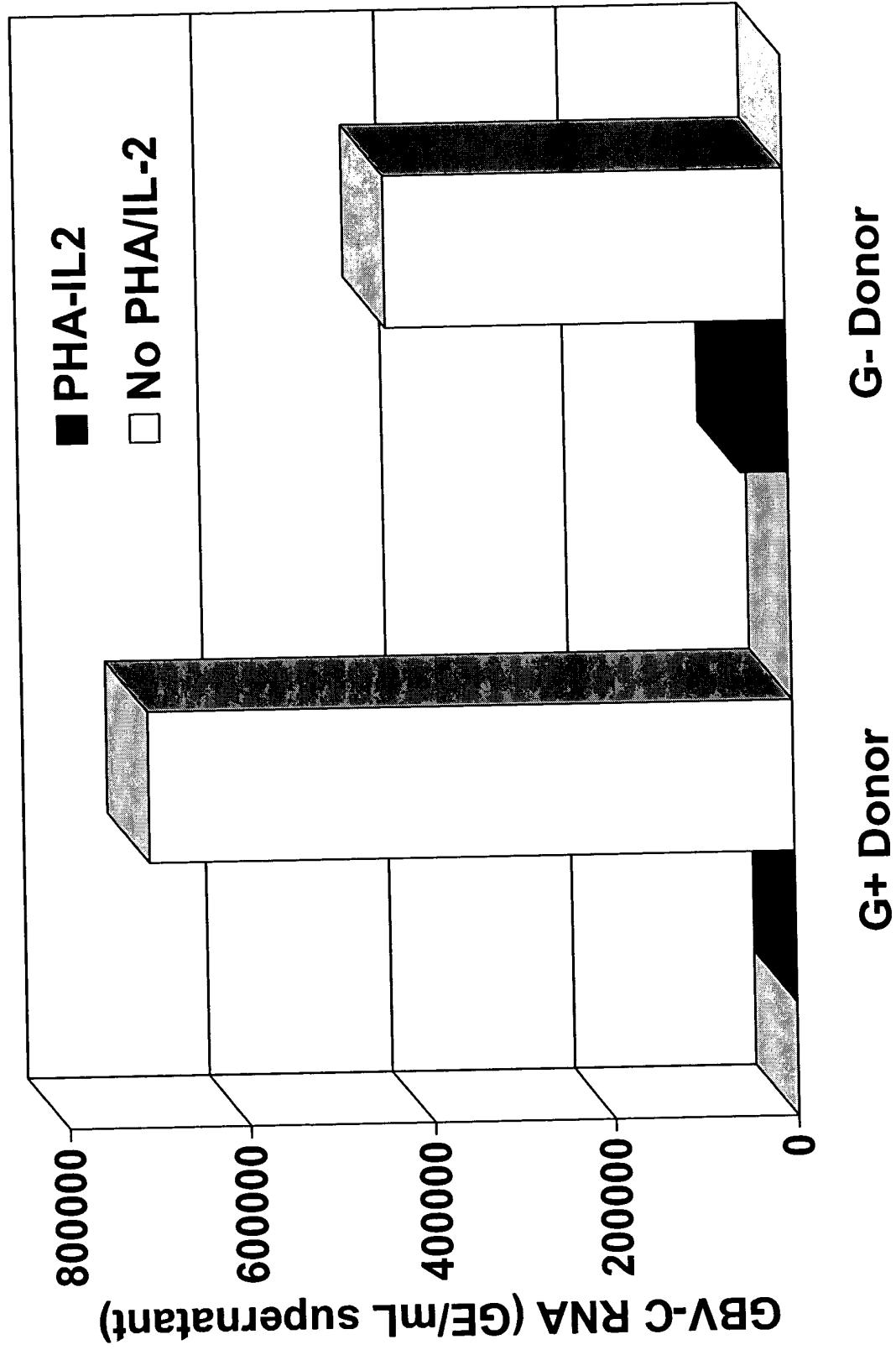
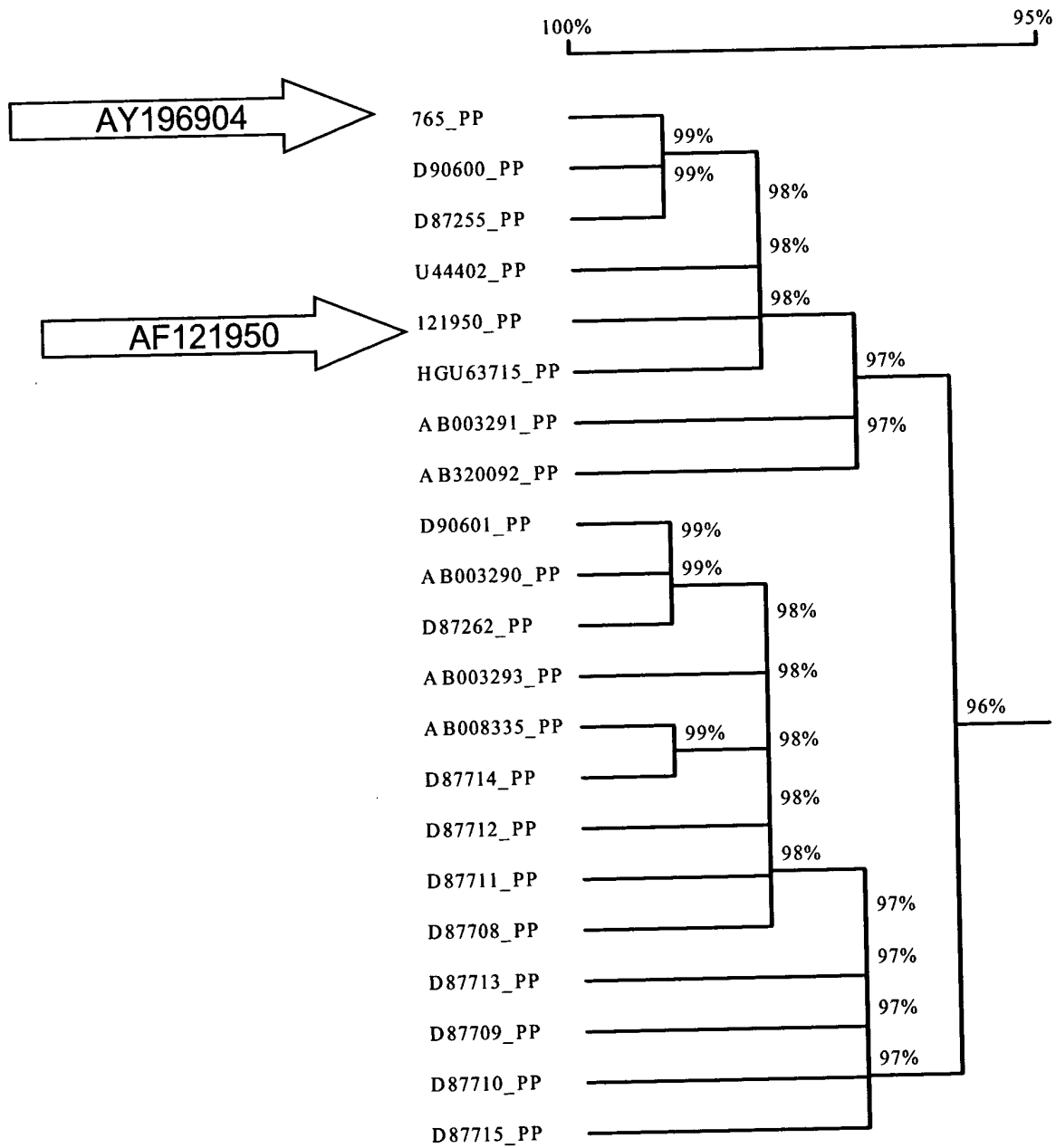


Figure 8 33



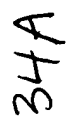


Figure 9B 34 B

|         |          |                 |
|---------|----------|-----------------|
| AA 2457 | AF121950 | FQYTPNQRIREMLKL |
|         | AY196904 | -----VK-----    |

|         |          |                   |
|---------|----------|-------------------|
| AA 2791 | AF121950 | GIPGAFPLSPPYMGVV  |
|         | AY196904 | -----G-SP---F---- |

Figure 9C 34c

121950 VALVNREPKVDEVQGYVVDLWEWIMRQVRMVARLRALCPVVSPLWHCGEGWSGE  
196904 -----  
121950 WLLDGHVESRCLCGCVITGDLVNGQLKDPVYSTKLCRHYWMGTVPVNMLGYGETSPLLA  
196904 -----  
121950 SDTPKVVPFGTSGWAEVVVTPTHVVIIRRTSAYKLLRQQILSAAVAEPYYVDGIPVSWDADA  
196904 -----  
121950 RAPAMVYGPQSVTIDGERYTLPHQLRLRNVAPEVSSEVSIDIGTETEDSELTEADLPPA  
196904 -----  
121950 AAALQAIENAARILEPHIDVIMEDCSTPSLCGSSREMPVWGEDIPRTPSPALISVTESSPDE  
196904 -----  
121950 KTPSVSSSQEDTPSSDSFEVIQSESETAEGEESVFNVALSVLKALFPQSDATRKLTVKMSCC  
196904 -----  
121950 VEKSVTRFFSLGLTVADVASLCEMEIQNHHTAYCDKVRTPLELQVGCIVGNELT  
196904 A-----